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ABSTRACT

In this report, the problem of the disadvantaged in the Israeli educational system is described from early childhood programs through higher education. An overview of education for the disadvantaged in Israel and in some Western nations, as well as an exploration of educational procedures which have been applied in various programs, form the main body of the report. Educational strategies and experiments are evaluated. Problems of vocational and technical education in Israel are discussed and the methodology for operation of such programs is criticized. Informal educational organizations are examined in terms of patterns of relationships of participants, reward systems, and activities. Informal educational frameworks in Israel are described. It is concluded that: (1) most research on the education of the disadvantaged emphasizes educational methods and techniques and neglects institutional-structural and cultural aspects; (2) a more intensive process of educational intervention is necessary if disadvantaged students are to be successfully educated; and (3) in addition to concentrating on formal and semi-formal schooling, research should focus upon informal education. It is further suggested that systematic studies of the failures of other systems to put into educational practice the results of research and experimentation may help the Israeli system to avoid repeating mistakes others have made. A lengthy list of references is included. (WI)

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THE EDUCATION OF THE DISADVANTAGED IN ISRAEL

Comparisons, Analysis and Proposed Research

Dr. Chaim Adler, Dr. Reuven Kahane, Ms. Amy Avgar

Summer, 1975

U.S. DEPARTMENT OF HEALTH
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FOREWORD

This is the second of two documents prepared at the Center for Research in the Education of the Disadvantaged at the instigation of Yad Avi HaYishuv, the Rothschild Foundation, which in 1970 turned to us for ideas about work in the field of education of the disadvantaged.

In the Spring of 1972 we submitted for consideration by the Foundation an Action Statement, the first of the documents agreed upon, which included an analysis of youth and adolescence in Israel and a list of projects and experimental intervention programs. The projects and programs concentrated upon informal education, an area not covered by the law of compulsory education and therefore suitable from the point of view of the Foundation's interests. Three of the proposals have been accepted and work upon them has been initiated.

The second document, a master plan of research in the field, essentially offers an overview of discoveries in the education of the disadvantaged in Israel and, to a lesser degree, in some Western nations, and of educational procedures that have been applied. The document focuses upon those areas which to our mind call for further research and experimentation before action can be taken. Our hope and expectation is that this master plan will find researchers ready to explore new

directions and Foundations and granting agencies willing to develop some of the suggestions outlined.

We are grateful for this opportunity to thank the Rothschild Foundation for its bounty and foresight in enabling us to study the problems and remedies set forth in our master plan and to broaden our own ideas. Profound thanks are due also to those colleagues who assisted us, especially Miss H. Belitzky, Dr O. Ichilov, Miss O. Levine, Mr. M. Lotan, Mrs. R. Peleg, Miss B. Presser and Miss T. Rappaport. At this time, too, we want to thank Mr. Y. Dar and Mrs. T. Scherf for allowing us to quote from their papers. Finally, we must express our gratitude to Mrs. E. Strouse for her long hours of patient editing.

INTRODUCTION

A. THE PROBLEM OF THE DISADVANTAGED

During the past few years, the once predominant belief in the power of education to reduce social inequality has been shattered. Based on the twin propositions that environment is the chief factor in the development of both personality and cognition, and that socio-economic status in a democratic society is largely determined by competence, this belief logically implies that school, as part of a person's social environment, can and should be central to the elimination of social and cultural disadvantage. By equalizing the distribution of cognitive skills among all ethnic lower-class and minority groups, the school was assumed to hold the key to equalizing chances for socio-economic mobility and thus reducing social inequality. It was argued, furthermore, that since schools differed in quality, improving inferior schools would provide the educational opportunities necessary to minimize social inequality and to improve the average achievement rates of the disadvantaged student.

Specifically, much of educational intervention focuses upon equalizing educational opportunities. This means schools for everyone, and, more precisely, the same schools, regardless of wealth or position. But this poses a double problem:

1.) Success in school depends on more than mere physical presence, which means that equality of educational opportunity cannot be guaranteed by more exposure to schooling.

2.) Since the scholastic or academic barrier seems harder to leap than the economic or political one, concentration of equalization efforts in schools may, a priori, be counter-effective.

The fact of school failure of the disadvantaged has given rise to two alternative strategies for equalizing opportunity: Compensatory procedures, on the assumption that such procedures will equalize competitive chances; separate streams or types of curricula, thus keeping everyone equally in school but abrogating the possibility of equal chances to compete.

While the first procedure assumes that compensatory intervention will equalize the chances to acquire such symbols of education as diplomas and certificates, the second is content to award successful, though segregated, students different types of diplomas or certificates.

Another definition of educational intervention to achieve equalization of opportunity emerges from the approach of the integrationists, who claim that students of varying socio-cultural backgrounds must, above all, be mixed if prejudice is to decrease and if common experiences and value

orientations are to burgeon and thus insure an integrated society.*

Of all the approaches, the most extreme seeks to evaluate equality of educational opportunity in terms not of the educational inputs and outputs, but rather of social outputs like prestige, vocation, income, and political power. The pervasive Israeli idea of closing the gap is probably not far from this approach.

The authors of this report share the critique of the last view. But from the standpoint of the disadvantaged groups concerned, success is judged by comparing both scholastic and socio-economic achievement with that of the middle class. We intend, therefore, to analyze the projects thus far undertaken and to propose educational alternatives, from the point of view of their potential impact on the development of those resources which the disadvantaged usually lack and which are crucial not only to school success but also to mobility and broad social participation. In other words, we shall consider educational procedures not only according to their ability to

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*This approach must be distinguished, analytically, from that which advocates integration as another strategy to improve the academic achievement of the disadvantaged.

develop academic and vocational skills, but also in terms of their impact upon the whole gamut of social endeavors. Consequently, we shall also evaluate procedures according to whether they help students, especially disadvantaged ones, to use the resources they acquire.

What is the role of environment as opposed to that of heredity in the process of personality development? Jensen (1969) claims that genetic factors are responsible for 85% of the inequality in cognitive skills and achievement. If he is correct, little can be done to effect change. Most social scientists and educators, however, have failed to accept Jensen's theory, partly because of inconclusive evidence and partly because of racist implications.

But even if we disregard or reject Jensen and retain belief in the pre-eminence of environmental factors, we come face to face with a second long-debated question: Can the school in fact contribute to cognitive equalization? More specifically, can compensatory education significantly alter the chances of the disadvantaged for school success and mobilty? Most of the attempts to summarize the findings of the evaluation studies of the compensatory education programs seem to cast doubt on the impact of the various manipulations on improving the relative achievement of disadvantaged students. Their persistent school failure contributes heavily to labeling them, and works as a self-fulfilling prophecy, perpetuating their marginality. At the same time, and in spite of arguments

to the contrary, there is little doubt that educational attainment and social status are related. Certainly the central roles have traditionally been played by the middle class and have correlated with their educational achievement. It therefore seems important to search for ways to better the achievement of disadvantaged youngsters and thereby their chances for social mobility.

Even without reference to evaluative studies, however, there is sufficient theoretical ground to question the approaches to educating the disadvantaged. In the first place, compensatory education is supposed to help the disadvantaged to adapt to the demands of the school system as it exists. If they adapt, they will get better grades and become more socially mobile. But this idea ignores the historic fact that until today people were educated according to their class, thus maintaining the distinctions. The result was that upper-class education differed fundamentally from lower. Recognizing this, what should be the role of schooling in inter-class mobility? Disadvantaged students face in school a difficulty which transcends scholastic achievement, the target of compensatory education. They are by and large victimized by socio-cultural conditions which produce deficits in a whole range of areas, of which intellectual skills are just one. Compensatory education usually fails to consider that the satisfactory academic performance of the middle-class student is part and parcel of the family's value system, of support of the peer group, and

of the commitment to education of the wider community. Middle-class students grow up in a society conducive to school success; the disadvantaged do not. It seems, therefore, that well-intentioned though they be, schools find it difficult to afford the same chance for school success to the middle-class and the disadvantaged. Traditional schools, regardless of innovation and adaptation, cannot single-handed develop among the lower classes the skills, behavioral norms, expectations, identity, sense of security, and motivation necessary for scholastic success.

It must finally be stressed that if schooling is to affect the social mobility of disadvantaged students, it must be related to social reality. Since success hinges on certification, there should be no special difference between the middle-class and the disadvantaged students who are awarded certificates. These, however, are merely the necessary conditions for role incumbence. To the extent that a job well done, promotion, and possible social mobility are related to education beyond the acquisition of certificates, significant differences might accrue between successful middle-class and successful disadvantaged students. Such differences might result from the fact that mobility depends upon the ability to use acquired resources and to convert one resource into another. Schools are largely unaware of or indifferent to the need to train youngsters to use in adulthood what they have learned in childhood, probably because middle-class children, who were the school's traditional

clientele expect that what is acquired will be used, without special training to that end. But the disadvantaged student, with nothing to copy or learn from and with little out-of-school experience of an intellectual or a professional nature, is handicapped in the use of his education even if it has been successful.

This argument may also relate to motivation. We have heard, in recent years, about the lack of "relevance" of what is taught in school, even for the middle-class student; that it is remote from present interests and from future adult roles. Yet middle-class participation in such non-productive school endeavors is perhaps symbolic of a sense of security in the stratification system. If, however, school is to become significant for disadvantaged youth, if it is to motivate and mobilize them, it probably must become more pragmatic, gear itself to real life, and offer training in the use of the material studied. It follows, therefore, that even if compensatory education were to achieve its goal of diminishing the negative association between achievement and origin, only one facet of the problem would be solved. If education is to affect role-incumbence and social mobility, it must add new programs and frameworks to the existing system and introduce changes in school operation.

The impact of traditional schooling upon chances for the mobility of the disadvantaged is also questionable. Middle-class students, in some cases upwardly mobile, in others fixed

in the status of their parents, prove that mobility patterns cannot be attributed solely to intellect or scholarship. The children of more affluent parents usually have at their disposal resources which include, besides intellectual superiority, prestige, political power, family ties and community relations, financial security, and acceptable social values. Given these resources, they are bound to acquire others. Not so the disadvantaged, who generally possess neither the first set of resources nor the potential for the second. Lacking prestige or wealth, they find it difficult to benefit from that fountainhead of middle-class resources, the traditional school.

Even if the school were to succeed in educating the disadvantaged, in awarding them certificates, and in training them to use their education, it is not clear whether sufficient social mobility would be generated to decrease the gap between them and the affluent. If this is true, educators must address themselves to a triple problem: Increasing the ways in which the disadvantaged can develop intellectual resources; helping them to use those resources, especially the intellectual ones; and finally exposing them to educational experiences which will develop resources other than the intellectual, or such prerequisites as a feeling of fate-control, a sense of worth, political skills, or work-norms. Education thus viewed becomes a production system in which young people in general and the disadvantaged in particular can be charged with resources relevant to and useful in their adult roles. A principal

assumption of this report, therefore, is that education is not exhausted in academic types of schools and conventional learning processes. The concept of education must consequently be broadened to encompass not only the traditional school but vocational schooling and training and informal and intensive educational institutions and settings.

Here, however, seems to lie one of the serious weaknesses in our report: Since most educational experiments and intervention programs have been carried out in formal educational systems, the literature dealing with compensation is school-based. But the literature, as we have said, vividly shows that most of the programs have had little success. At the same time, however, there is not much evidence to prove that the suggestion made in this report - to shift some of the attention and compensatory efforts to educational institutions and situations other than school - is valid. These facets of the educational process have seldom been experimented with, investigated, or discussed.

Many educators, moreover, tend to reject the claim that compensatory strategies to reverse social and cultural disadvantages have failed, arguing that such strategies have never really been tried. If most compensatory education, they say, consists mainly of starting school at an earlier age, lengthening school hours, adding more school weeks to the year, or diluting the requirements for disadvantaged students (usually through different types of grouping), it is clear

that disadvantaged students will scarcely benefit. If teachers and other educational personnel have received little or no special training for educating students whose background handicaps their learning ability, lack of success is not surprising.

In spite of such arguments, enormous effort and large sums of money have been invested in compensatory education. This report, therefore, can neither ignore the effort nor fail to view it critically, always keeping in mind that the promises made by compensatory intervention to reverse the impact of social and cultural disadvantage have not been fulfilled.

Since almost all existing evidence points to the limited success of the various compensatory strategies, many social scientists tend to attribute the failure to the age at which such intervention is introduced. Some, like Passow (1970), argue in favor of earlier intervention in view of the crucial importance of early childhood as a springboard. Others, like Coleman (1961), insist, however, that special attention should be paid to adolescence. Since early intervention may create conflicts, difficult for the very young child to cope with, intervention in adolescence - when there is less dependence on parents, and the challenges of adult life start to become real and the lack of resources to cope with them, threatening - may lead to greater success.

The theory that equalizing school expenditures will in turn equalize compensatory opportunities has channeled large sums of money into disadvantaged schools. The Coleman Report (1966), however, completely undermines this viewpoint, demonstrating 1) that American schools are qualitatively more similar than has previously been assumed, and 2) that expenditure has very little to do with achievement.

The Coleman Report has been interpreted in various ways. Jencks (1972) uses its data in order to prove his thesis that schools have little bearing either upon cognitive or social and economic equality. Moynihan (1972) concludes from the data that, although maximum equalization of school expenditure may have been achieved, this is simply not the heart of the matter. What nowadays seems central to many social scientists is the social composition of both school and classroom. Both the Coleman Report and other evidence concerning the failure of existing compensatory programs lead such scientists as O'Riley (1970) and Pettigrew and Cohen (1967) to conclude that integration is the solution. Since compensatory programs for the disadvantaged are directly associated with segregation, their failure lends support to the integrationists, who base their arguments on empirical evidence as well as theoretical analysis: "... the findings of research indicate that school integration appears to be the most effective approach known for generally reducing educational disadvantage..." Coleman indicates that only one condition - social environment in the classroom - is in consistent correlation with achievement.

Although the homogeneous classroom may create a trap for the disadvantaged, it would be erroneous to assume that mere desegregation would solve the entire problem. (In a later chapter we will discuss the distinction between desegregation and true integration.) David Armour (1971) maintains, for instance, that a thorough analysis of existing evidence indicates that none of the studies were able to demonstrate conclusively that integration has had an effect on academic achievement as measured by standardized tests.

Although in favor of integration, Jencks asserts that it would have little, if any, effect on equalizing cognitive skills. "Most cognitive inequality is within racial groups, within economic groups and within schools. Desegregation will not affect these disparities much... However... if we want a desegregated society we should have desegregated schools." Thus, for Jencks, school integration is an ideological microcosm of the society as a whole and is more likely to generate social solidarity than cognitive equality.

Even if we assume that, with the proper intervention, schools can bring about cognitive equality, Jencks' thesis does raise certain questions about the interrelationship of the educational, social, and occupational systems. He maintains that because there are still wide differences in socio-economic status among people of similar education and similar ethnic and/or socio-economic background, at least half the variation is due to other unmeasurable and uncontrollable factors.

Today most social scientists would agree with Jencks that students of equal merit do not necessarily reach equal positions.

The logical implication of Jencks' data is that education has in fact very little bearing on inequality of results. Does this mean that the importance of education in achieving mobility should be ignored? Coleman (1973) addresses himself to this issue when he says, in regard to Jencks and his colleagues: "In their attempt to show that most income inequality is due to luck, they tried to show that it is not much related to anything else such as family background..." thus, "they obscure the inequality of opportunity that does exist in American society." Coleman's critique of Jencks' position raises a fundamental distinction between inequality of opportunity and inequality of results.

Schools indeed cannot contribute much - and certainly not single-handedly - to decreasing inequality in results. Yet they can, and indeed should, contribute to lessening inequality of opportunity. The failure to make this distinction led Jencks to an extreme, unjustified, and erroneous position about schools and their potential effect on equality.

The foregoing discussion offers three theoretical positions regarding the potential impact of the educational system upon equalizing opportunities in society. One position stresses the predominance of heredity as the determinant in the educational process. Such a position narrows considerably

the possibilities for intervention, since heredity is not subject to change by education.

The second position takes a macrosocial approach which suggests the futility of educational manipulation in the absence of broad social reform. The educational system, it is assumed, can have little impact upon the present opportunity structure in society. The third position accepts the potential role of the school in changing personal resources but accepts only limited probability that changes within the educational system alone will have far-reaching effects on the social system. The rest, therefore, is primarily what happens within the school, even though this will not suffice to generate social change.

This report takes the last position. It differs from the approach of those whose position is similar mainly in its broadened notion of education, pointing out that the school's traditional work in the cognitive realms does not fulfill all the needs of the disadvantaged, nor is the school the only vehicle affecting their educational opportunity structure.

We consider that the disadvantaged suffer from a deficit in some resources crucial to full social participation. Individual or group capacity to participate in society is determined not only by the obvious economic prerequisites or scholastic ability, but also by a whole range of personal or group resources. Education, which therefore can be defined as a system of production, should provide a means of generating such resources,

particularly among those who do not possess them.

Accordingly, we can view various strategies or pedagogic inputs in terms of their potential for advancement of the disadvantaged population. Educational inputs can be classified as organizational, didactic, content and curriculum, regulations and sanctions, and social control. Outputs can be measured by skills, cognitive-intellectual development, and emotional development, all of which are resources in the sense in which we have defined the preceding terms.

In reality, of course, neither inputs nor outputs are distinct entities, but we shall nevertheless try to analyze various educational projects in terms of the dominant inputs and outputs, paying particular attention to those resources, apart from cognitive skills, that can be generated in school.

This report will examine the total educational system as one concerted effort toward solving the problem of the disadvantaged. Since we believe that education must seek maximum alternatives to help the disadvantaged, we propose to examine not only the treatment of the problem within the formal educational system but the possibility of attacking it informally as well.

Informal education, especially of the intensive variety, seems to have been almost completely neglected and may in fact be able to channel adolescent energies. One of its significant virtues is the use of the peer group to influence the individual. To quote Coleman, "At a crucial point in

life the peer group's social climate can help mold the adolescent into a responsible adult and guide him toward a fruitful career, or it can in contrast direct him to misfitting occupations and leave him ill-equipped and poorly motivated for further education." Our report will therefore examine informal education as a mechanism for mobilizing the positive resource potential of the peer group, both to bolster pupils' chances to succeed in school and to provide another channel for acquiring resources necessary in life.

Underestimated also is vocational education, which, in Israel and elsewhere, is considered at best a terminal educational stage and at worst a refuge for dropouts from general academics, leading to the nearest but lowest station. We believe that vocational education may be able to develop and overcome some of the disadvantages characteristic of lower-class youth.

Under no circumstances should the spirit of this report be misinterpreted. Its critical approach is by no means that of certain pessimistic scholars concerning the possible impact of education on the developmental potentials of disadvantaged youth. Founded on the belief that education is a major input for limiting and even banishing disadvantage, the report attempts to broaden the scope of education beyond traditional schooling. It would, of course, be wrong to divorce any proposed educational measures from other vital concerns like insuring a steady income, strengthening parental ability to

cope (also perhaps through education), and decreasing family size. We contend, however, that in order to fight disadvantage and its ramifications education in the broad sense is central. By differing from most of the work in the field that repeatedly indicates how few educational chances the disadvantaged possess, we set forth our conviction that if a variety of educational methods and techniques are applied, the chances for success may be significantly increased.

A final word about the perhaps slightly pretentious title of this report - "A Master Plan." Although we outline further directions for research, we are primarily concerned with appraising the work that has been done. Thus the idea of "A Master Plan" can be justified only by our effort to provide an overall conceptual scheme for the analysis of all possible inputs for improving the life chances of young people. In a way, we redefine the student's role to include possible increases in his resources which are not necessarily cognitive; success as a student is not only evidence of greater knowledge. This report can be "A Master Plan" because it calls, among much else, for the examination of non-school-based techniques to motivate the disadvantaged to work harder in school and perform successfully. It is "A Master Plan" because it searches for avenues which will lead youngsters unsuited to formal schooling back to the mainstream of education and its goal of increasing the resources of everyone.

This document is not to be considered the final word, but rather an introduction to discussion, cogitation, and research.

B. The Scope of the Problem of the Disadvantaged - the Israeli Educational System

For the purpose of this report we have defined disadvantage as a social situation within which certain groups - geographic, political, religious, ethnic, or other minority - have a more limited access to resources than the rest of the population. This definition is not synonymous with discrimination: if a religious minority lacks prestige or a geographic grouping political power it is called disadvantaged, even though no discriminatory policy directly causes its plight. At the same time, we contend that unless the ruling majority attempts to intervene actively to limit the resource deficits of a minority group, disadvantage, especially if it is multifaceted, will tend to perpetuate itself and even increase. If this is so, it follows that even though background and history of disadvantage is objective, the sense of discrimination aroused by disadvantage is subjective.

The sense of social disadvantage in Israel first emerged with the huge waves of non-selective immigration after the foundation of the State. This refers in particular to the masses of immigrants in the late Forties and throughout the Fifties who came to Israel from the Islamic Middle East.

These Eastern Jews were as a rule in a position of disadvantage because of their limited education and/or vocational training, their lack of funds, and their large families.

The social and economic gaps between veterans (mostly of European origin) and Easterners (mainly new immigrants, even through the objective conditions of Eastern veterans were not dissimilar) contradicted the very ethos of the society. Such a state of affairs was incongruent with both the need for national solidarity of the newly-born nation and the external challenges it had to face, as well as with the socialist-egalitarian principles of the founding fathers and the institutions they had created. Education was conceived as one, if not the primary, tool with which to bridge the gap.

Initial expectations were that unification and absorption would take place if the educational experience of both groups were uniform. Because of the sharp differences between the two groups, however, such formal educational exposure not only failed to narrow the gap but often widened it. At the end of the Fifties, therefore, the first steps were taken toward compensatory education; since then new ones have been added. These steps can be broken down into three categories: Greater or more intensive educational opportunities for the disadvantaged by means of an earlier start in school or additional classroom hours; investment of special educational efforts in that segment of the disadvantaged student population which had succeeded in school (mainly through the intensive

and total-educational resources of boarding schools); and the subdivision of homerooms into "streams" or "sets." These latter measures, applied when the child is twelve, or in the sixth grade, serve to channel the disadvantaged into the slow stream, thus making it difficult, if not impossible, for the official ideology of teaching each group according to its needs to counterbalance the negative impact of segregation.

It is difficult to estimate what effect more than fifteen years of educational effort has had upon the scholarship of disadvantaged students, and whether this effort is reflected in better chances for social mobility and economic or political success when adulthood is reached. Although interesting signs of improvement and change are apparent, do they result from educational intervention or general economic and political betterment, or both? Would change have occurred without intervention and, if so, to what extent?

The main indication of improvement seems to be the general acceptance of Eastern Jewish immigrants, in spite of their educational deprivation, of the law of compulsory education. Nearly all Israeli children aged five to fourteen (since 1968, fifteen) are in school; even among the disadvantaged, dropout rates are not alarming. Thus sons and daughters of practically illiterate families have spent nine years in modern schools. Until 1968, however, the compulsory education law covered only elementary education, making the transition

to secondary education crucial. It is significant, therefore, that while in the mid-Fifties about 30% of the students in post-elementary education, and only about 10% of the students in the academic track, were of Eastern origin, by the end of the Sixties these percentages had risen to 43% and 30% respectively.

It thus seems appropriate to note here that, although over 40% of the post-1948 immigrants hailed from under-developed countries, Israel has made impressive successes in absorption. Not only has it retained its democratic character, but it has diversified its political machinery; it enjoys a vivid, varied cultural life; above all, it has taken its place among modern, industrial societies and has trained most of its working force, regardless of their school record, to adapt to sophisticated technological requirements.

The academic success of students of Eastern origin is nonetheless far from satisfying. The Seker, a nation-wide written examination, was used until 1972 by the Ministry of Education to select those students who, after they had completed 8th grade, qualified for scholarship aid in secondary schools, through a graded tuition scheme. Although in 1971, 45%, and in 1973, 52.5% of children of Western origin scored 80 out of 100 on the Seker, only 10.5% and 14% respectively of the students of Eastern origin achieved such scores. It is thus not surprising that graduation from academic high schools, not only prestigious but prerequisite to many future jobs and

especially to higher education, is still a major bottleneck. By the end of the Sixties only six out of each one hundred students of Eastern origin had successfully passed the matriculation examination, as compared to thirty-five out of each one hundred Westerners. Thus in spite of the system's remarkable expansion and the concomitant growth in representation of Eastern youth in general secondary education and particularly in academic high school, the number of graduates of Eastern origin from academic high school has not significantly changed.

It becomes clear, however, that even these limited statistics indicate that the handicap of Eastern origin is diminishing as the distribution of scholastic achievement, and probably of economic stability and political participation, increases within the Eastern population. Such a development, though not overwhelming, certainly signals change in at least a segment of the disadvantaged group, but at the same time adds to the difficulty of planning further improvement and merits evaluation. This report, however, focuses upon just these problems, seeking as it does a common framework for discussion of formal education, vocational training, and informal education for the benefit of the disadvantaged. Because of the great and probably growing variance among disadvantaged groups, vocational training and particularly certain informal educational procedures may serve as supportive measures for those disadvantaged students who seem able to

meet the challenges of school, and alternative educational channels for those among them who cannot.

According to the criteria used by the Ministry of Education to define disadvantage, 165,000 children, or 44% of the elementary school population, were so classified in the early Seventies.* A composite measure of Father's Education, Size of Family, and Father's Ethnic Origin is the criterion by which disadvantage is measured, and thus forecasts the number of students who will do badly on the Seker. These 165,000 students have only a 40% chance of scoring 70 out of 100, and of those, 35,000, or 18% of the total, are so severely disadvantaged that their chances are only 25%.**

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*Ministry of Education: Measures for Characterizing the Social Composition of the School and Methods for Allocating the Budget Among Schools. Jerusalem, January, 1971 (Hebrew).

**Based on each of the three criteria, the degree of disadvantage in the population in the early Seventies was: 1.) 11.6% of the fathers of elementary school pupils never went to school; an additional 50% did not go beyond grade school. 2.) There are eight or more children in the families of 11% of the elementary school pupils; up to four in 43%. 3.) 56.5% of the fathers of these children were born either in Asia or Africa.

This criterion can also be used to define the degree of school integration. When the ratio of disadvantaged students does not exceed 30%, the school is considered homogeneous; when the ratio is between 31% and 70%, the school is considered heterogeneous or integrated; and when the ratio is at least 71%, the school is homogeneous-disadvantaged, or segregated. In the early Seventies, 12.5% of the disadvantaged were enrolled in schools of the first type, nearly 32% in schools of the second type, and a majority of 56% in schools of the third. Thus seventy percent of the disadvantaged go to schools where they outnumber the middle-class students.

In the past ten years much improvement has been discerned in the educational attainment of the disadvantaged, but their relative scholastic failure, both at the elementary and post-elementary level, continues to limit their numbers in school and therefore their chances to move into jobs demanding education and into higher education itself. This report proposes to evaluate the knowledge thus far accumulated about the relative contribution of education to the development of the disadvantaged and to suggest further kinds of research.

A final word about the population seems fitting. As the yardstick of disadvantage developed by the Ministry of Education indicates, the initial congruence between Eastern origin and disadvantage has given way to an ever-growing spread in educational achievement, as well as in socio-

economic conditions within the Eastern groups. It is logical, therefore, to differentiate, in analyzing and in judging educational projects and procedures, between the "disadvantaged" and "children and youth under stress." The definition used by the Ministry of Education fits the fact that the "disadvantaged" still seem to be mainly of Eastern origin, but not the fact that their parents' education and/or ability and willingness to limit family size are potent mitigating factors. "Children and youth under stress," usually the most disadvantaged, are always of Eastern origin. They are, as a rule, unable to take advantage of the existing school system, whether academic or vocational, and they consequently drop out of the formal frameworks. We contend that a small democratic society with a modern school system cannot remain indifferent to this group. These forty- to sixty-thousand youngsters, aged 12-18, demand special educational measures to overcome their special disadvantage if they are to grow into participating and fulfilled adults.

CHAPTER I

A. MANIPULATIONS AND STRATEGIES WITHIN THE FORMAL EDUCATIONAL SYSTEM IN ISRAEL

A1. Early Childhood Programs

Israel, like other countries, has placed heavy emphasis on inputs into early childhood education. Growing awareness of school failure in the early years has produced a parallel effort to develop early childhood programs which, in theory at least, will prevent the accumulation of deficits and at the same time increase the chances for success of disadvantaged pupils. The tangible results of this theorizing is that roughly 10,000 children between the ages of one and four are enrolled in about 200 day-care centers, with another 140 institutions planned to absorb an additional 7,500. It must be noted, especially in view of the planned expansion of this type of educational framework, that few institutions in Israel are equipped to train the hundreds of professionals needed for such an endeavor. This is of particular importance if these institutions are supposed to contribute to the personal and educational development of the disadvantaged.

Among the pioneering experimenters with cognitive development in early childhood, Ortar and Carmon (1969) are noteworthy for their effort to evaluate the impact of the quality and quantity of mothers' speech upon children's

intelligence. In the first stage of the research project, Ortar and Carmon investigated the relationship between certain characteristics of mothers' speech and accelerated or hampered verbal ability among their babies. Initially, fifty-seven mothers and children of various backgrounds were investigated

Although a relationship was found between the quality of a mother's speech and the intellectual level of her child, the correlation was not significant. When background factors and mothers' intelligence were controlled, none of the qualities of speech were found to be correlated with the expected IQ of the child. Furthermore, after five months of home visits made two or three times a week, during which time aides played with the babies, no differences were found between the experimental and the control groups. Mothers, however, began to grasp the principles of the treatment and were probably able to use them with their children. Although attempts to develop patterns of speech met with some quantitative as well as qualitative success, in the substitution of nouns for pronouns, other changes were negligible.

The researchers, concluding that the difficulty was methodological, undertook a second study (Ortar:1973) to overcome these difficulties and to isolate the language factor from such other factors as genetics and environment. Environment, intelligence, and education of the mother were held constant, while such relevant characteristics as amount, development, clarity, and repetition of speech were isolated.

Despite similarities of background, significant differences were found in quality of speech. Except for one negative correlation between lack of clarity and amount of speech, no clear relationship obtained among the various speech patterns. In terms of the relationship between mothers' status and speech and the verbal ability of the children, the one variable relating to the child's IQ was how much the mother talked. Although the research does not teach us much about the factors determining the quality and quantity of the mothers' verbal interaction with their children, it does indicate that verbal ability in itself is a significant resource. Furthermore, we view the home as a focal point for intervention, where inputs will affect instrumental processes other than IQ.

A2. Manipulations in Kindergarten

One year of kindergarten for children between the ages of five and six has been compulsory since 1949. In 1973-74, about 123,000 children were enrolled in about 4,000 kindergartens, staffed by some 4,000 teachers. It is worth noting that almost all four-year-olds and about half of the three-year-olds from disadvantaged families are enrolled in kindergartens. From the point of view of the disadvantaged, kindergarten is a place where cognitive development is accelerated and transition to primary school achieved, to say nothing of early isolation from a deprived environment.

The first efforts to use kindergarten to prepare children for the challenges of school were made in 1958 in thirty-two kindergartens. Greater readiness for school among youngsters exposed to early enrichment (Glick:1961) led to expansion of the program, and by 1969 it was operative in 750 classes for disadvantaged pupils.

Further enrichment followed S. Smilansky's (1958) findings of significant differences in IQ (16 points) between children of Eastern background and those from European families. Smilansky also noted certain shortcomings in kindergarten teaching methods, including lack of variety in activities, insufficient use of games for educational purposes, and unrealistic expectations on the part of teachers vis-a-vis the performance of disadvantaged pupils. On the basis of Smilansky's conclusions, educational research was intensified; she herself developed socio-dramatic games and pedagogic operations based on inductive principles (1968).

In 1967-68, kindergartens began to experiment with the teaching of reading, testing reading readiness, and the virtues of global as opposed to phonetic methods. Not only was it found possible to teach reading in kindergarten, but it became clear that achievement in first and second grade improved (Smilansky and Shfatia:1972).

Dina Feitelson's (1969) study of the effect of integration on achievement among disadvantaged children in kindergarten is based on goals of a somewhat broader nature, combining

both intellectual and social factors. Feitelson established four kindergartens - three integrated and one homogeneous-disadvantaged - in which to carry out her experiment. The assumption was that children from middle-class families would become educational agents for the disadvantaged. Three major conclusions were drawn:

1) Disadvantaged children in integrated kindergartens did not progress intellectually more rapidly than those in homogeneous classes.

2) Pupils usually interacted with others from their own ethnic group, although in the games corner choice was on the basis of sex rather than economic class.

3) The impact of the experiment was greater on middle-class than on lower-class children.

Feitelson's study underscores the central role of the teacher in determining norms and in establishing a social climate and a bridge between the two groups. Efforts to find a common social denominator seem likely to produce responses that cross ethnic and class boundaries and that can be translated into resources for mutual relationships or used to diminish prejudice.

The most significant resources in early childhood seem to be interpersonal relationships and emotional development. It is surprising, therefore, that, with the exception of direct aid through family allowances, little help has been given the disadvantaged family as an agent of socialization.

Avima Lombard (1970), however, has introduced the only early childhood project in Israel that focuses upon the child within the family. Started in 1969 at the Center for Research in the Education of the Disadvantaged (now The NCJW Institute), the program attempts to activate the mother on the assumption that the psychological changes (from acted-upon to actor) will produce changes in the child's intellectual ability. Lombard and her associates intend to investigate their further hypothesis that this type of intervention may produce changes in the family structure.

The children in the experiment are usually taken from one kindergarten, with another serving as control. Semi-professionals make weekly home visits for one to two years, bringing with them pre-planned materials for problem-solving, language, and sensory exercises, which are explained to the mother, who makes a progress report each week. The program, intensively supervised by professional personnel, produced significant changes by the end of the first year, not only in a number of intelligence indices, but also in family involvement and in the child's school work. Follow-ups on the first experiment showed, furthermore, that one year after the home visits had been discontinued, the differences between control and experimental groups were still significant. (Report forthcoming.)

Here we have an example of a strategy with more than one expected output, which indicates that investment in the family may generate resources not purely cognitive.

As opposed to verbal methods of developing cognitive-intellectual skills, the experiments of Rachel Bilsky-Cohen (1972) assume that transmission of concepts can be facilitated and internalized by creative body movement. Early evaluation of the program shows an advantage for experimental groups over control groups, but it is too soon to determine the technique's lasting effects, which may, like those of other early childhood projects, decrease over time.

Summary

Since the research and projects analyzed here revealed that most of the work entailed quantitative changes, efforts are being made to absorb greater numbers of disadvantaged three- and four-year-olds. Similarly, the Prime Minister's Committee for Children and Youth Under Stress has suggested that the number of day-care centers be increased, that play centers be established for parents and children, and that education divisions be formed for mixed age groups (three- to seven-year-olds). What has so far been mostly neglected are manipulations in content (curriculum) and changes of a more structural nature (integration) in kindergartens; these are harder to implement and deserve further research and experimentation.

A3. Manipulations in Elementary School

The eight-year elementary school is congruent with the Law of Compulsory Education, according to which eight years of school have been obligatory and of course free, until the recently enacted school reform of 1968 added one year of free compulsory education. (See Middle Division.) Elementary school is the place where educational manipulation has been heavily concentrated.

The discovery in the early Fifties that reading difficulty was a source of school failure led to treatment of reading problems in the elementary schools. S. Smilansky and others (1972) experimented with various methods to improve reading in the first grade, where it was discovered that, regardless of method, results were positive and not significantly different. The fact that one program did not prove more successful than another points to the advantage of concentrated yet differentiated methods. Remedial reading programs were so highly intensified that by the end of the Sixties the problem was really more or less under control, certainly as far as reading technique is concerned.

Although reading in itself is no longer a factor contributing to failure, the educational problems of the disadvantaged have not disappeared. Persistently low achievement tends to support our view that skills of this type alone are not sufficient to assure success in the educational system.

In 1952, the extended day was introduced in grades 2-5, on the assumption that longer hours of study would benefit disadvantaged pupils. By 1969 the program was operating in 2,500 classes in 254 schools, emphasizing additional academic activity on the one hand and/or additional social activity on the other. Academically, the extra time was used for less structured and more informal studies, and socially, for clubs and peer-group activities.

A recent study conducted by the Szold Institute for the Ministry of Education (Guttman et al:1972) indicated that there were no differences in general knowledge between the control groups and those exposed to the extended day, and limited differences in academic achievement were visible in grade four only. Although group solidarity was greater in the experimental classes, self-image remained unchanged. Apparently, therefore, the extended day has to some extent affected academic performance and group solidarity but not general knowledge or self-image.

The most important finding of the study was that a comparison of long-day classes, whose main emphasis was on further academic instruction, with those whose main emphasis was on social and group activities showed that in the latter the academic achievement of disadvantaged students improved.

In 1963, the Ministry of Education and Culture introduced in Grades 6 - 8 a grouping system usually called "setting," using homogeneous levels of pupils grouped according to

ability in three subjects - math, English, and Hebrew - and thus working together for about one-third of the school day. The Ministry of Education survey of 1965 showed positive attitudes toward grouping among principals and teachers - understandable, since grouping eases the pedagogic task. A major evaluation study of this grouping procedure, initiated by the Ministry of Education and conducted by the Szold Institute with Ford Foundation funds, attempted to measure the effect of grouping on pupil performance. No significant differences were found between the achievement of the experimental group and that of the control group. The study scotched the fear of many educators that grouping p oduces a negative self-image. It did show, however, less solidarity in homogeneous groups (Guttman, et al:1972). (The chapter on Homogeneity provides a detailed discussion of grouping procedures.)

The "activity class" was introduced in Israeli elementary schools by F. Glick and A. Shaked (1951), with the goal of deformalizing teaching, individualizing work with students, and planning a curriculum determined by the structure of the classroom. No real breakthrough was made at that time, partly because of the inflexibility of the educational system, which clung to frontal teaching methods inconsistent with those of the activity classroom. The failure, therefore, relates to the structural conditions rather than to the method.

The catalyst for the open classroom came in the Sixties when concern for integration increased. (See chapter on Integration.) Distinct advantages of activity classes are indicated for success in the education of disadvantaged students, though much more systematic research seems to be needed. The transition from kindergarten to grade school is eased by the flexibility and informality of the open-class situation, where deformalization, group activity, and emphasis on appropriate learning materials seem to contribute to an atmosphere in which new skills can be utilized and converted into effective resources.

Since 1969, a controlled field experiment in integrated schooling, based on activity classes, has been under way in Jerusalem. The entire school system of two neighborhoods has been reorganized so that three schools are now fully integrated and use, with two other schools, the activity class method. Children from disadvantaged families represent about 40% of each class. To make teaching in an integrated activity class possible, the staff has been increased.

A follow-up study by the Center for Research in the Education of the Disadvantaged (Klein and Eshel:1972) suggests that the achievement of disadvantaged pupils is significantly higher in integrated classrooms and that the achievement of middle-class pupils not only does not decrease but improves. While improved achievement of the disadvantaged students results mainly from the integration process, comparison with

the control group allows us to conclude that benefits to middle-class students accrue from the activity technique itself.

This study is exceptional by virtue of the material gathered about integrated classes on a longitudinal basis. The first group will have been followed at least from second through sixth grade, each year adding another group to the study, even though the accumulated cohorts will stretch over one year less for each added one. Although most of the information concerns academic achievement, the latter part of the study, as yet unreported, includes data about the sociometric position of pupils and observational insights about the activity-class method in general. The authors assumed in their first report that integrated classrooms have a positive effect on the development of other than cognitive resources; these assumptions are being systematically studied in the later stages of the project. The question of why integration makes a positive impact on achievement remains to be answered.

Whereas integration has given rise to other structural changes, another strategy - the use of technological aids to enrich teaching methods - is necessarily accompanied by changes in curriculum. The introduction of television, for instance, has brought with it new teaching materials and educational devices to assist the teacher. One of the programs, borrowed from American television where it was specifically geared to the disadvantaged, is Sesame Street, which had a significant

effect on disadvantaged children in the States and seems to have decreased the gap between disadvantaged and middle-class viewers. The effect of the program in Israel has been somewhat diminished, because the American content is irrelevant for Israel audiences. Evaluation nonetheless showed a positive effect on the viewer's achievement in those areas stressed by the program, which seems on the whole to have had a differential effect among its viewers, benefiting school-age children more than kindergarteners (Solomon:1973).

Summary

Elementary school has been the traditional locus for concentrated intervention and manipulation. Since numerous programs have been simultaneously initiated, it is difficult to sort out the differential impact of each one, but we can assume that although each program (extended day, grouping, integration, etc.) individually may not have had important results, the concerted effort over a decade and a half has had significant impact.

An overall evaluative research program currently conducted by A. Minkovitz and his associates at the School of Education of the Hebrew University, and funded by the Van Leer Foundation and the Ministry of Education, attempts to assess the present nature, scope, and rate of change in the gap in school achievement between disadvantaged and non-disadvantaged students, mainly at the elementary school level.

Why continue to spend a high proportion of the budget allocated for education of the disadvantaged on two projects - the extended school day and grouping - which research shows to have only a limited effect? It seems more beneficial, from our point of view, to study the possible effect of such different school contexts as structural modification of the system and varied and innovative curriculum.

The gap between the two groups, extreme in the early Fifties, is said by some to be not so wide today. New research, however, questions this.* Nevertheless, the number of Eastern students who complete elementary school has continued to grow, so that more than 40% of the students in secondary schools of all types are of Eastern origin, while the secondary-school-age population as a whole is about 55 percent (Smilansky:1973).

A4. Manipulations in the Middle Division (Junior High School)

The middle division is the product of the Israeli Educational Reform introduced in 1968, calling for an additional year of compulsory education, a six- rather than an eight-year elementary school, and thus a junior high school for grades 6 to 9 (Rimalt:1971). The reform grew out of proposals by a special parliamentary commission, established in 1966, which

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*Samocha and Peres: "Ethnic Inequality in Israel." MEGAMOT Vol. 20, 1974, pp. 5-42 (Hebrew).

Egoz: "The Measurement of Social Gaps." MEGAMOT, Vol. 21, 1975, pp. 235-239 (Hebrew).

sought to reduce the educational gap between ethnic groups by upgrading the quality of education and integrating classes within the middle division. Several options were accepted for incorporating the newly established grades into the educational system: 1) a six-year comprehensive school; 2) a six-year academic high school; and 3) a separate institution of three years following six years of elementary school. The commission also proposed to lengthen the school day and to enrich the program by group activities and informal educational approaches as a means of facilitating socio-ethnic integration.

Such a reform, however, with its concomitant need for properly trained teachers and counselors, cannot be fully carried out until the manpower shortage is handled; it is therefore another example of inputs of a structural nature requiring changes in other inputs as well. Thus it is very important to mention that the reform has already increased significantly the number of qualified teachers in general, and university-trained teachers in particular, who have moved into the middle school. The goal is to complete the implementation of the reform by the end of the Seventies, thus making possible further changes of this type and a gradual transition properly guided by research.

Discussion of the merits of the reform continues, with opposition mainly from the Teachers Union and a few academics. But evaluation has been fragmented and inconclusive. The

Ministry of Education has initiated comprehensive evaluative research in the area of the reform, to be carried out by the Center for Research in Education of the Disadvantaged and the Department of Education at the University of Tel Aviv, under the direction of Chaim Adler, Michael Chen, and Aryeh Levi. The study will be longitudinal until 1975/6; 3,000 pupils will have been tested, once in each grade (7th-9th); also 400 parents will have been interviewed, as well as 400 teachers. It will attempt to ascertain achievement in social integration, personal relations, and attitudes to other ethnic groups, and will examine the impact of the reform on aspiration, professional choice, continuation of studies, self-image, and family attitudes toward change, juxtaposing pupil achievement and perception against the inputs of their parents and teachers.

The introduction of school reform was, however, an attempt to manipulate simultaneously the structure of the school system, the social and educational context, and the curriculum of grades seven through nine. A multi-dimensional intervention of this kind seems to us a worthwhile endeavor.

Summary

The school reform has attempted to substitute or supplement compensatory education with integrated education directed toward equal opportunity. Without the results of comprehensive evaluative research, we cannot conclude that integration 1) affects achievement and 2) is related to the same process

in society, reducing inter-ethnic tension and increasing solidarity. Similarly it remains to be seen whether increased inputs and emphasis on academic achievement, which raise the standards of the system, will handicap the lower-achievement groups because of their special needs or avail them of improved chances for success. But the mere fact that three out of six years of high school are free and compulsory accords with today's world-wide educational trend. Structural change (or reform?) also seem to be necessary; without such changes, no innovative program has ever been successful.

A5. Secondary Education

Secondary education in Israel is neither compulsory nor free, although the scheme for graded tuition fees introduced in the late Fifties provides massive aid for gifted students from poor and disadvantaged backgrounds. The purpose of such graded fees is to exempt students in secondary schools from tuition costs, according to individual need and starting at a prescribed financial level.

The secondary educational system is essentially composed of two types of schools - academic and vocational. The academic track was historically the channel for social mobility because it was the only stepping stone to higher education. The success of the system vis-a-vis the disadvantaged was therefore gauged by the number absorbed into the academic

track. But with the increased number of disadvantaged students who have gone successfully through elementary school but have either not qualified for or dropped out of academic high schools, both public attention as well as educational planning turned toward developing alternatives to this purely academic kind of secondary education. (See chapter on Vocational Education.) Consideration of efforts of this nature leaves the strong impression that far less has been done here than in pre-school and elementary years.

An important effort, however, has been made by Carl Frankenstein, who started an education project for disadvantaged students in the Hebrew University High School in 1972. He assumed - drawing on his general theoretical approach - that the conventional teaching methods do not work for the disadvantaged because they do not consider individual pupil needs in general and do not concentrate on the rehabilitation of their thinking processes in particular. The condition for the success of the program was a re-definition of the teacher's role and the intensive training such a re-definition demands. Teachers were therefore specially trained by Frankenstein and his staff to concentrate on thought processes instead of specific subject matter. They were sensitized to the problem of "faulty thought processes" and introduced to techniques for dealing with such problems. Implicit in this role re-definition was the idea of personal reward for partial rather than total success. Special emphasis was also placed on the

role of the social worker, who links the pupil and the school on the one hand and the school and the family on the other.

It is important to indicate that, like other compensatory programs, this too necessitated homogenization of teaching methods to adapt to individual needs. The experiment was therefore performed with the two existing homogeneous classes of disadvantaged students, who were at the same time part of a middle-class, highly prestigious school. Thus it became an experiment in homogenization within a heterogeneous context.

The results thus far are that a significantly high number of pupils exposed to Frankenstein's technique have passed the matriculation examination. Because of the unique role played by the initiators, the program unfortunately does not lend itself well to mass-scale implementation.

In another, less intensive, effort to help disadvantaged pupils, a tutorial program was introduced in 1971 by the Ministry of Education, involving 2,000 students. On the assumption that the peer group may be an effective factor in helping the disadvantaged, the program manipulates informal relationships within the formal framework by assigning a student-tutor one or two years older than the tutee to work with two or three pupils up to three times a week. In view of the generally positive reaction to the program, the Ministry of Education asked the Center for Research in Education of the Disadvantaged for a follow-up study. The researchers investigated such variables as academic achievement, motivation,

internal control, and self-image. The study attempts to gauge the impact of the program on tutees as well as on tutors.

An interim report on the first phase of the research (Sprinzak and Ben-Eliyahu:1973) indicated greater effectiveness in religious schools, where the program seems to have been organized more thoroughly and where tutors have been intensively trained. Generally, the social impact seems to be greater than the academic and the help of peers preferred by tutees over that of teachers.

One of the important alternative frameworks to regular academic schools for disadvantaged students is, we feel, the boarding school (pnemia). Israel has a long boarding-school tradition (see chapter on Informal Education: Total Institution), established for orphans of the holocaust and immigrants, but not, until recently, embracing significant numbers of disadvantaged. In 1959 a boarding-school program was established for disadvantaged children of above-average ability, an idea initiated by M. Smilansky and D. Neva (1970), whose follow-up study showed that the achievement of the pupils in the program surpassed that of the general population. Seventy percent passed the matriculation examination, an astonishing rate, even given the fact that these were above-average pupils of the disadvantaged population. The program was expanded, and in 1970, 1,300 disadvantaged children were living in these boarding schools.

The pnemia is based on multiple inputs and as such represents a unique educational enterprise. The assumption has been that by limiting the impact of the depriving environment on the one hand, and by providing a comprehensive, multidimensional, and intense environment on the other, the education of the disadvantaged can be enhanced. Research until now has been fragmented and heavily concentrated on changes in academic performance. As the chapter on Total Institutions indicates, the principles of pnemia education are in keeping with the spirit of this report and recommended for further innovation (see Chapter III).

The desirability of boarding school education is still being debated. Its advocates maintain that the boarding school offers intensive educational opportunities to those among the disadvantaged who otherwise would not succeed, whereas its critics speak of a "brain drain" of a potential elite among the disadvantaged which will widen the gap between the advantaged and disadvantaged segments of society. Smilansky is presently engaged in following up the first cohorts of the experiment and may thus help to resolve the argument.

Summary

Although intervention and research into its potential impact on the education of the disadvantaged at the secondary-school level has thus far been limited, the few programs and

studies undertaken seem much more conclusive than those done at other levels.

On the other hand, the pnemia, which has yielded impressive results in the education of the disadvantaged, still has room for broadened manipulation. Boarding schools, for instance, can be constructed in outlying or priority areas, the so-called areas of stress, and renewed efforts can be made to reintroduce the once widespread practice of educating groups of disadvantaged adolescents in kibbutzim. We know so little about the differential impact of different types of boarding schools on the intellectual and the general development of disadvantaged students that further research is indicated, research geared also to increase our understanding of the source and dynamics of the impact of the pnemia. We need to know more also about the limits to be set on creating boarding schools integrated either within a particular school or among a number of schools in one vicinity.

Very few solid attempts at compensatory education can be recorded, even at the pre-secondary school level. If, in other words, compensation is considered a means of providing special pedagogical inputs with specially trained and supervised educators to help disadvantaged students to overcome their deficits, then the study by Carl Frankenstein and his associates demands serious attention. We must achieve far wider use of Frankenstein's methods, unique in that he employed an identical curriculum but totally different instructional techniques.

Finally, informal educational techniques and contexts appear to have been barely used or tested, either as auxiliary resources or as alternatives for those who have dropped out of school. The tutorial project may achieve the former possibility, an issue which will be discussed in Chapter III.

Our conclusion, contrary to that of many educators and psychologists, is that the findings clearly show that adolescence is not too late and that input at the secondary level has a salutary impact on the educational development of disadvantaged students.

A6. Manipulations in Higher Education

Until a few years ago, the problem of higher education for the disadvantaged student did not exist, and its existence today is surely a positive sign, evidence that the level of education of the disadvantaged is being raised.

The changing representation of students of Eastern origin at different educational levels is clearly illustrated by the table which follows, whose last line relates directly to our discussion.

Indicators for the Ethnic Gap in Post Primary and Higher Education

Grade or Type of School	Year	Percentage of Eastern Students In Population at Large	Among Students	Indicator
Post Primary Education	1967	46.3	35.6	-10.7
	1972	56.6	46.1	-10.5
9th Grade	1967	46.3	45.3	- 1.0
	1972	56.6	57.0	+ 0.4
12th Grade	1967	46.3	18.9	-27.4
	1972	56.6	34.8	-21.8
Acad. High Schools	1967	46.3	25.4	-20.9
	1972	56.6	32.0	-23.7
Vocational High Schools	1967	46.3	47.0	+ 0.7
	1972	56.6	58.1	+ 2.4
Recepients of Mat. Cert.	1967	46.3	12.6	-33.7
	1972	56.6	20.8	-34.9
University Students	1967	55.0	12.2	-42.8
	1972	49.1	14.1	-35.0

[1974: THE EDUCATIONAL SYSTEM THROUGH NUMBERS, Jerusalem (August) Hebrew.]

While the percentage of students of Eastern origin at the university level increases steadily with the years, their degree of under-representation is greater here than anywhere else.

The Pre-Academic Preparatory Program (Mechina) was established jointly by the army and the universities to qualify promising students from disadvantaged backgrounds who had not passed the matriculation examination for higher education.

Although non-disadvantaged students have been accepted, the program remains mainly a channel for the disadvantaged. The evaluation of the Mechina at the Hebrew University, conducted by the Center for Research in Education of the Disadvantaged, revealed a lower dropout rate among Mechina graduates (10% as opposed to 30% in the general population), no difference in grade average between the two populations, and increased commitment and more realistic expectations (Nissan:1973). Those who were accepted in the Mechina, it must be noted, were always highly motivated, with a clearly instrumental approach to studies. Since this research does not deal with the social dimension of the program, social relations and utilization of social and academic skills accrued during the Mechina still need inquiry.

In the United States, most experiments in higher education are based on lowered requirements, like, for instance, the open admission policy for Blacks. The emphasis in Israel has on the other hand usually been on attempts to raise standards. Because secondary education in Israel is not yet compulsory or free, it is necessarily the most selective, since it is the place where potential candidates for higher education are sorted out. This process makes the Mechina an important recovery institution, another chance for those sorted out of the system at the high school level. On the examination qualifying students for secondary education, formerly administered at the end of eighth grade, an exception was, however, made for students of Eastern origin, whose

qualifying norm was lower. The Eastern population was unhappy with this lowered standard, which was terminated when the qualifying exam was abolished at the time of the school reform.

B. EXPERIMENTS IN FORMAL EDUCATION OUTSIDE ISRAEL

In an attempt to place the Israeli experiments in a broader context, we propose to examine sample programs for some of the major educational approaches to dealing with the disadvantaged in America and Great Britain. Israeli experiments in formal education have borrowed heavily, from America in particular, in three areas: early childhood education, homogenization of school populations, and integrated education.

Many of the programs of intervention in the education of the disadvantaged focus upon the period of early childhood, still considered an important developmental stage. Homogenization, or grouping, continues to be a primary organizational device, used in Israel and elsewhere to facilitate compensatory educational techniques by grouping the disadvantaged according to ability to help them overcome educational handicaps. Integration, partly a reaction to the limited success of compensatory education, is not only an administrative arrangement of the students, allowing disadvantaged and non-disadvantaged to study together in a common educational setting exposed to

identical inputs. In societies where most disadvantaged students are non-white, as in the United States, or from specific ethnic groups, as in Israel, integrated schooling has, of course, a much wider socio-political significance.

The three major types of intervention which we shall examine, and the theoretical assumptions upon which they are based, have served as background for most of the Israeli experiments and research just discussed.

B1. Programs for Intervention in Early Childhood Education

The major programs in early childhood education are roughly divided into three conceptual categories - maturationist, learning-theory, and Piagetian - plus the exclusively technical addition of family involvement. All depend upon similar and often identical techniques and activities, overlapping in a way of which the impassioned prose of the theoreticians gives no hint.

1. Maturationists

Maturationists believe that the disadvantaged child has inner positive emotional and cognitive qualities that will unfold and develop in a stimulating, positive environment.

The early programs were therefore unstructured and global, offering the child a "total life experience." This was an effort to expand the child's world, differentiate his sensory experiences, encourage fantasy expression, and enable him to deal with problems and frustrations (Biber:1966).

a. Bank Street

When existing evaluative criteria were applied, the evidence began to indicate that this positive but rather amorphous approach was not noticeably closing the educational gap between middle-class and disadvantaged children (DiLorenzo: 1969; Karnes:1969). The so-called Bank Street College approach, however, has never been completely abandoned in American early childhood education, and its dominant elements still appear in the other approaches to be discussed. In fact, the interest that the British Infant School, with its wholistic, informal methods, has aroused recently among American educators can be considered a return to the belief that a singular, cognitive approach to early childhood education may neglect important aspects of child development.

b. Montessori's view, like that of Bank Street, is that all educational input should relate to a "total life experience," exposing the child to a broad range of stimulating situations. In the Fifties and Sixties various reasons were given for considering the method appropriate to education of the disadvantaged (Meizitis:1971):

1) Because of the minimal reliance upon disruption by teachers and peers, the Montessori method should develop attention and concentration, areas in which the culturally disadvantaged are presumably deficient;

2) The active manipulation of concrete objects should advance the disadvantaged in their development of concrete operational ability;

3) The method's perceptual training exercises, self-corrective materials, and demands for industry, impulse control, and self-direction seemed particularly relevant to the problems of the disadvantaged;

4) Montessori seemed to provide the optimal match between the child's developmental stage and his environment, especially important for lower-class children educated in a curriculum designed for the middle class.

Critics of the method, on the other hand, believe that it does not allow for fantasy, self-expression, social interaction, and, most important, sustained verbal interaction with peers and teachers. It is this last difference that sets it off most sharply from the specific-teaching programs. Neither does it provide tools to make the transition to subsequent traditional schooling.

The summarized research findings to date show that although Montessori training is more effective with the culturally disadvantaged than no early childhood training at all, it has not resulted in more significant gains than the traditional pre-school programs, and has achieved significantly fewer gains than structured cognitive-oriented programs.

2. Learning-Theory Approach: Structured Program

The structured specific-learning programs dealt directly with the deficiencies of the child. They tried to reverse developmental lacks in motor coordination, language development, perceptual development, attention span, achievement, and general emotional maturity, relying heavily upon a behavior-analysis approach to learning.

a. Don Bushell's program, the most consistently Skinnerian of the ones we have considered, attempts to affect learning by rigorously applying the principles of behavior conditioning. Ever higher levels of achievement are reinforced by material and non-material rewards. The teacher must, however, closely monitor the progress of each individual child, a process facilitated by putting four adults at a time into one classroom (Bushell:n.d.).

Evaluative data of the program were not available in Israel at the time of the present writing.

b. Hodges et al (1967) devised a diagnostically-based pre-school curriculum for children in Appalachia, intended to remove deficits in wide areas of development that included language, motor coordination, and concept formation. They too used conventional pre-school techniques in a direct and structured way, defining the goals for each child individually and then building activities around the goals. Again, there was no commitment to any theoretical framework of development

beyond the need for working toward specifically defined aims by carefully designed activities, and the use of some learning-theory ideas about concrete rewards for specific responses.

c. In structured specific-learning, the Bereiter and Engelman (1966) program is probably the best known. Its underlying rationale, that language development is the necessary basis for cognitive development, has been reinforced by the work of Bernstein (1964), Hess and Shipman (1965), and Deutsch (1965), all of whom have shown the limited nature of verbal communication between parents and children in lower-class homes.

This program, unlike the first three, does not rely in any way upon traditional teaching methods and curriculum, but is characterized by verbal drill, role repetition, and highly individualized instruction. Classes are fifteen to twenty minutes long, with sixty minutes out of the two-hour day devoted to intensive work in small groups of five. Grouping is based on ability, but the class is entirely teacher-oriented. Since even at this early age the disadvantaged child is academically behind his middle-class peers, there is an underlying rationale that he must work very hard to catch up. Although the most intensive instruction is in language skills, reading, and arithmetic, all other aspects of school, such as music and social-play time, are similarly task-oriented. Nothing in the program is based on intuition or chance; the aims are specific and clearly related to defined learning

objectives. All material is sequenced from the simple to the complex.

The high degree of teacher-centeredness, the heavy reliance upon rote repetition, and the lack of concern for socio-emotional development have been the chief targets of the program's critics.

d. The Blank and Solomon (1969) program uses language to develop the child's ability to organize his thoughts, reflect upon and comprehend events, and choose among alternatives. The authors seek, in short, to give the child the tools for ordering and comprehending his environment. This, together with a desire for maximum verbalization, led to the evolution of their tutorial program, in which the teacher and individual child interact in a Socratic relationship. The teacher initiates and expands cognitive interchange around a specific activity and persists in trying to evoke logical and consistent responses in the pupil. But the unique feature of their program is not so much the selective use of language as the consideration of how emotional difficulties peculiarly affect the individual child's cognitive functioning.

The program has been attacked, as has that of Bereiter and Engelman, for its neglect of the non-cognitive aspects of development and its emphasis upon language as the sole basis of intelligence. (The question of the economic feasibility of widely implementing a program calling for a one-to-one teacher-student relationship has also been raised.)

e. Kelly, Nimnicht and McAfee (1970) have launched in Greeley, Colorado, a program that uses educational technology. The autotelic responsive environment utilizes self-correcting materials that provide immediate environmental feedback concerning the consequences of a child's actions. These include a Language Master (a self-correcting audio-visual device) and a typing booth. The program strives to reduce adult interference in the child's activities, controlling his actions only through selection of the materials included in the classroom. The program emphasizes language development, but the authors are also interested in problem-solving abilities, concept-formation, sensory and perceptual acuity, and development of a positive self-image.

3. Piagetian Influences

A comprehensive discussion of Piagetian developmental theory and the question of its applicability to educational practice is out of place here, but a few points relevant to educational programs should be mentioned:

1) Piaget's theory incorporates both maturationist and learning-theory ideas. Interaction between child and environment leads to the development of invariant cognitive stages whose advance can, according to some, be speeded up through proper educational stimulation.

2) The opportunity to interact with one's environment, to experience the world rather than to experience language, is the basis of intelligence.

3) Piagetians see content not as a goal but as a tool to build cognitive structures. They do not focus upon teaching the "correct answer," but rather upon the process of thinking that leads to it.

a. Weikart (1970), the innovator of the Perry Pre-School Program, which was heavily influenced by Piagetian theory, did indeed seek to use experience as the basis for teaching and learning, evaluating the child's cognitive-developmental level before further appropriate experiences and interactions were offered. If the child were helped to master and integrate his present skills and knowledge, he might, it was believed, maximize his chances of reaching the next stage of cognitive development

Besides the strong cognitive Piagetian orientation, the program concentrated on verbal development and used such traditional techniques as field trips and socio-dramatic play. Home visits were included to strengthen the mothers' involvement in their children's education.

b. In his "Learning to Learn" program, Sprigle (1969) combined maturationist and Piagetian theory, based on the author's assumption that control, motivation, attention, and responsibility come from within. Given the proper tools and stimulation, the child can be free to develop at his own pace. "Proper" here refers to a series of orderly sequenced materials and activities grounded in Piagetian ideas of

cognitive growth and development through stages. As the name of the program implies, the aim was not to prepare the child for a first-grade curriculum, but to focus upon cognition as a process, by emphasizing those tasks of manipulating, organizing, and classifying that lead to internalized thought.

Although activities and materials were structured, the child's interactions with his classroom environment were not. He was free to go from one learning center to another at will and to choose his own activities, thus developing social and affective factors.

4. Family Involvement Studies

Several of the studies mentioned earlier attempt to involve parents, especially mothers, in the education of their children. In contrast to those educators who assume that proper early childhood training cannot be achieved by the disadvantaged family, people like Weikart, Klaus and Gray, Karnes, and Gordon want to work with the child within his natural family framework in order to:

1) Strengthen the family by inducing change from within, rather than subject it to pressure for inner differentiation and separation;

2) Extend the newly learned skills of the family to the school-age child in his out-of-school hours, to other children in the family, and even to other families in the community;

3) Affect the child's school performance by "re-educating" his family. There is existing evidence that parential variables in intellectual, affective, and interactive spheres are related to cognitive growth and school achievement.

Ira Gordon (1969) trained para-professionals to instruct mothers in stimulation exercises for their infant children, in order to enhance the infants' development while increasing the mothers' competence and self-esteem.

Klaus and Gray (1966) and Weikart (1970) worked with school-age children and included home visits as part of the intervention process in the programs which have been described.

Karnes (1969) studied the influence of parent-training on the intellectual and language development of pre-school-age children not enrolled in any pre-school program.

None of these four research projects present conclusive evidence as to the efficacy of parental involvement programs. Nevertheless, the high correlation between home variables and school success means that further research is needed to determine which aspects of the general home environment are critical in this respect and what kinds of home intervention would be effective Work on general home environment has in fact become one of the central issues in research on the disadvantaged.

The Office of Child Development, as well, is presently establishing a "Home Start" program in which health, nutritional, and educational services are brought to the homes of families whose children are not participants in Home Start Pre-Schools.

BIa. Comparison of Factors

Table I represents an attempt to find the major axes along which the programs are grouped, giving a condensed comparative picture of the theoretical and practical dimensions along which they do or do not differ. The axes are:

1) Source of socio-emotional growth,
2) Games and materials used,
3) Use of rewards,
4) Teacher-student roles,
5) Program intensity,
6) Organizational strategies.

A more detailed description follows:

1) Source of Socio-Emotional Growth

None of the programs covered here deny the importance of socio-emotional growth to the development of the pre-school child and the interactive nature of one type of growth upon the other. They differ, however, in the way that they use compensatory education to handle this aspect of the child's development. We have isolated three universal approaches to the issues.

In the first category are programs that specifically define either the existing socio-emotional characteristics of the child, or his desired socio-emotional behavior, or both, and then use various educational techniques to achieve this behavior.

The second approach does not specifically state socio-emotional goals, nor does it plan for changing behavior in this area. But it does provide for the emotional expression and social interaction considered necessary to "proper" development, allowing the child to interact freely and informally with materials as well as with other children.

In the third category are programs based on the idea that the child's socio-emotional needs are amply met through cognitive gains in the classroom. This means that ego strength is acquired through cognitive skills, apparently the chief source of emotional growth at this stage. It should be noted that of the four programs based on cognitive growth as the source of emotional growth, two introduce elements of non-cognitive activity that can be said to foster socio-emotional expression and growth. The latter two programs differ basically, however, in their consideration of the child's emotional level in working out his cognitive curriculum. It should be further noted that a program can combine planned and unplanned emotional and social responses.

These last two programs represent a radical change from the traditional American approach to early childhood

education, but their actual effect upon socio-emotional development has not yet been systematically evaluated.

2) Games and Materials

The programs used a wide variety of materials and games to facilitate growth in the classroom, either to evoke specific responses in the child, or to allow relatively free and informal interaction between the child and the materials. Either existing materials, or innovative ones, usually sequenced, were chosen, usually for their specific qualities, manipulative rather than expressive. Control of classroom materials limits the range of activities in which the child can indulge during school hours. Although the child is encouraged to explore these materials freely, some researchers want them used in cognitive rather than expressive ways. Bereiter and Engleman focus even more sharply on the cognitive aspect of the classroom by virtually eliminating the use of materials and games and demanding instead an almost purely verbal level of functioning during instructional hours.

3) Use of Rewards

The advent of behavior analysis and the introduction of learning theory concepts into educational frameworks have placed the issue of reinforcement and reward at the center of educational strategy. While Skinnerian principles have made us newly aware of the importance of such factors as immediate feedback, successive approximations, positive rather than negative reinforcement, and specification of desired behavioral

goals, the question of motivation and reward has long been intrinsic to educational strategy and the principles of its usage can be extracted from all programs.

While all agree that rewards are essential to learning, people differ about what they should be. Rewards like money or food are often considered morally objectionable, because of their utilitarian and temporary nature. Out of the programs under review, three approaches to the question of rewards emerged:

(a) Concrete External Rewards

Whether they be tokens, candy, or materials related to classroom activity, concrete rewards go along with teacher approval, and may theoretically come to be eliminated by the learned value of the secondary reinforcer. The use of concrete rewards is gradually decreased and the child is led toward profounder levels of motivation. Bushell associates concrete and intrinsic motivation by giving the child a chance to exchange tokens for participation in an activity he particularly enjoys or has mastered. In this way, the reward value of task-mastery is inherent in the activity, eventually allowing tokens and other external reinforcements to be eliminated.

(b) Non-Concrete External Rewards

Teacher approval and attention can be potent reinforcers for young children, and most programs make great use of them, sometimes as the sole source of reinforcement. Some combine material rewards with teacher approval, quickly replacing the concrete with the verbal; others extend the use of the concrete much further.

(c) No External Rewards

These programs incorporate the idea that the child will try to succeed if he is intrinsically motivated. While it is doubtful that the function of the teacher as a source of attention and approval is eliminated, these programs do reflect a belief that this role should be minimal in ultimate cognitive development. Often if a secure teacher-student relationship is established, the child can work cognitively without having to look for teacher approval; the sense of security is strong enough to carry over and allow him to work freely for the sheer enjoyment of mastery.

It must be recognized that teacher approval and attention are not the same as affective teacher-student relationships. Bereiter and Engelman, for example, see no place in the classroom for emotional bonds, but they do utilize approval as

a reinforcer. Klaus and Gray, on the other hand, plan directly for "emotional" classroom experiences and within this framework see great importance in developing affective bonds beyond the approval the child gets for giving a right answer.

Our descriptive material of many of the programs was insufficient to allow us to form an accurate picture of actual events in the classroom. It is possible that programs purporting to reduce the link between success and external reward actually do so no less than programs emphasizing the importance of teacher approval, and that statements about intrinsic motivation are ideal rather than actual.

(4) Teacher-Student Roles in Cognitive Activity

Weikart suggests a model for determining the locus of control in the classroom, focusing not on the structured-unstructured dimension, but upon teacher-student initiative and response.

In the first category of programs, all cognitive activity is initiated and controlled by the teacher. Bushell, however, gives the child a chance to choose from a range of activities determined by the teacher.

In other programs, either the child or the teacher initiates cognitive activities. When the activity is initiated by the child, however, the teacher directs it toward her own determined goals. In other words, the child does not determine his curricular needs, but is given a margin of freedom of manipulation within a pre-determined framework.

The last category includes programs in which activity is almost exclusively child-initiated, the teacher responding to stated needs and only infrequently taking the initiative. In all these programs the teacher maintains control by deciding what materials the child will use and by directing him, when necessary, from one activity to another.

Most of the new programs devised for the culturally disadvantaged clearly belong in the second category, where some middle path has been found to determine the course of classroom events, in order to direct but not stifle initiative.

(5) Program Intensity

In order to discover the degree of exposure of the children to the various programs, we considered:

a) The number of treatment years,

b) The number of hours a day,

c) The extent, if any, of parent and community involvement,

d) The extent of small-group work.

The range was wide. Programs varied from four months to three years, from twenty minutes to two hours a day, from no parental involvement to almost complete parental takeover of the teaching role. There was, however, uniformity on such measures of intensity as the number of children to a teacher and the number of learning hours a day.

The Blank program, representing an extreme in teacher-student ratio and treatment time, constitutes the only dramatic departure from this fairly uniform picture.

(6) Organizational Innovations

It is immediately evident that early childhood programs in America have not varied in organizational strategies, even if we were to include parental involvement. This is not surprising because so little has been done to deformalize and loosen existing systems. It is a plausible but untested possibility that organizational innovations may facilitate achievement goals, especially in light of the budgetary and

manpower problems that all educational systems face. Some attention has been given to this point by Follow-Through's compulsory use of parent and community aides in the classroom (Follow Through/1971), but there seems to be much more scope for innovation and improvement than has thus far been attempted.

At the same time it should be noted that the existing organizational innovations have not been isolated and tested for efficacy, thus making it difficult to gauge their usefulness for the disadvantaged. The one that has been closely studied - racial integration within a traditional kindergarten setting - has not shown results as good as those of the structured but non-integrated programs (Karnes:1969). But no study has been made of this or any other organizational strategy within a different kind of setting, nor of its effect upon non-cognitive, social, and emotional factors.

Table I bears out the introductory statement that despite the theoretical polarities between advocates of the various approaches, implementation often overlaps. Although beliefs differ about how children develop, pre-schools tend to

do pretty much the same things with their charges; no single program differed radically from the others in all dimensions.

Since overlap is so evident, it seems difficult to talk about the theoretical superiority of one approach over another without finding empirical differences in outcome. Should such empirical differences be found, one might want to weigh the possible benefits of costly research, which would carefully control for differences among the variables in all their combinations and permutations in order to discover which of them contributed to success.

BIc. Evaluation

1. Head Start and Evaluation of Early Childhood Education

The best known and most controversial of the American educational intervention programs was Head Start. It was not an action program of the kind we have been discussing, but rather an administrative unit whose most important function was to determine policy. Begun in 1965, it was the first major American attempt to train pre-school children in cognitive skills.* An effort was also made to improve physical health,

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*An earlier Federal program, Title I, was a broad program with no specific focus; it showed no overall positive results and was abandoned after a few years.

provide social and psychological services, and involve parents in their children's life at school. As a pioneer venture at a time when the problems of cultural disadvantage were weighing heavily on the conscience of the American policy-maker, it aroused much national interest. This enthusiasm ultimately militated against it, since no program could have fulfilled the expectations it aroused as the one solution to the problem of disadvantage.

The major evaluational study of Head Start on a national scale was done by the Westinghouse Corporation in 1968/69. It examined the impact of the program on a national sample of 1,980 children in the first, second, and third grades on tests of cognitive achievement and affective development. Many comparisons were made between participating and non-participating disadvantaged children. Data was gathered through tests of aptitude, achievement, and attitudinal factors, through interviews with students, parents, and center officials, and through rating forms completed by teachers on individual behavior, motivation, and intellectual climate of the school. The principal findings, summarized and re-evaluated by Smith and Bissell in 1970, were:

1) Summer Head Start programs produced no cognitive or affective gains that persisted into elementary years;

2) Full-year Head Start programs produced no differences at any grade level on a number of measures of affective development;

3) Full-year participants in Head Start scored below the national norms on the Stanford Achievement Test and the Illinois Test of Psycholinguistic Abilities at all three grade levels. First-grade participants approached the national norms on the Metropolitan Readiness Test. At the same time, non-participants seemed to catch up with Head Starters during the early elementary years;

4) Head Start was most effective in predominantly Negro urban centers, and in the Southeast;

5) Parents indicated positive involvement in the program.

Fault has been found with the sampling and matching techniques of the study, but reanalyses do not seem to refute the basic finding that Head Start on a national scale did not lead to lasting cognitive gains.

BIb. Comparison of Results

We tried to compare evaluational results, in order to reach some tentative conclusions about the relative strengths and weaknesses of individual programs. The insufficient data

in the reports, however, made such a comparison impossible on any of the evaluational criteria except the Stanford-Binet. We compared data for only those structured programs that 1) used experimental and control groups in evaluating their programs, and 2) reported pre-experimental and post-experimental Stanford-Binet scores for both these groups.

Figures 1 through 6 show the mean gains on the Stanford-Binet of experimental and control groups for the programs of Weikaft, Klaus and Gray, Karnes, Bereiter and Engelman, Blank and Solomon, Sprigle, and Hodges. Although several evaluations of the Bereiter and Engleman program, traditional programs, and Montessori programs have been made, only the Karnes Evaluation (1969) was used here. A major comparison done by Miller and Dyer is not available at this writing.

DiLorenzo et al (1969) compared kindergarten programs in eight school districts in New York State over a period of three years, finding significant differences between disadvantaged treatment and non-treatment groups for the Stanford-Binet, PPVT,*, ITPA,* Metropolitan Readiness Test, and Metropolitan Achievement tests. This superiority was caused entirely by the structured programs, with no contribution made to the gains by the traditional programs of the sample.

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* Peabody Picture Vocabulary Test

**Illinois Test for Psycholinguistic Abilities

The superiority achieved in the structured programs was lost by the end of the second grade. Neither structured nor traditional programs caused any significant improvement in self-concept or physical growth. The study is noteworthy for its use of two sets of controls, a non-treatment disadvantaged group and a middle-class group, itself divided into treatment and non-treatment groups. At the same time, it is important to note that in this study the traditional groups did advance more than the non-treatment groups, making it appear that, despite the insignificance of the advance, treatment, any treatment, is better than no treatment at all. The structured programs, though they led to significant acceleration, did not succeed in closing the gap between disadvantaged and middle-class groups. In achievement scores, for example, although one year of pre-school closed the gap by three points, the 14 3 point difference that remained could not be erased without five more years of compensatory education, given the same rate of development.

Unlike other evaluations considered, this one was <u>not</u> carried out by the program-developing staff and so was a less certain target for "expectancy effect." The relatively small but nevertheless significant gains found by DiLorenzo were achieved through an evaluation of programs not executed in a university setting, but by local school boards under conditions closer to the actual gains to be expected if these programs were to be adopted as a matter of national

or state policy and transferred from the university to the field. Under such changed conditions, one can anticipate a drop in teacher sophistication, knowledgeableness, and commitment, as well as different pupil and parent attitudes to a program run by a local community rather than by a prestigious university. But even if one can attribute the high number of gains in various programs to an "expectancy effect," the fact that such gains persist in the field is promising.

Considering the wide geographic range and large number of subjects in DiLorenzo's study, it seems reasonable to adopt the general evidence of his data, that non-treatment groups decline in cognitive ability while traditional treatment groups maintain their level with no significant gains. (Figure 7b, c). Support for this is found in Figures 8 and 9 which indicate that anything done with these children is better than nothing, but that only specific and well-planned activities can begin to close the educational gap between them and the middle-class populations.

The Karnes study compared children in five programs ranging on a theoretical continuum from highly directive to non-directive. Her own program (Amelioration of Learning Deficits) and the Bereiter and Engelman program (Direct Verbal) were the most directive and structured. In the Amelioration program, manipulative materials were used to motivate and stimulate language, while rote repetition

was avoided by the use of games. After pre-school, the Direct Verbal group had a second year of special program treatment while the Ameliorative group went to regular kindergarten with one hour of special instruction a day. The other three groups (Montessori, Traditional, and Community Integrated) went on to regular kindergarten.

At the end of the pre-school year the two language groups showed the greatest gains on the Stanford-Binet, while the Ameliorative group showed the greatest gain on the ITPA, and the PPVT showed no significant difference between groups.* In the second year, only the Direct Verbal group had made significant gains on the Stanford-Binet, but on the ITPA the Ameliorative group was significantly higher than the other three. By the end of first grade there were no significant differences between groups on any of the three tests, but achievement tests showed the superiority of the two language programs in bringing children up to grade level and even beyond.

Figures 1 through 6 show the mean gains of experimental and control groups for each of the programs, none of which differs dramatically from the other. It is immediately evident that all the studies show high cognitive gains during the period of program implementation and a drop in gains

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*There were no significant differences among any of the others, although the traditional group did show greater gains than the Montessori and the Integrated groups.

as the children progress away from the program in time. An exception to this fade-out phenomenon is seen in Hodges' data, but they are inextensive and highly inconclusive, since his follow-up does not include all experimental subjects.

One can also see a marked difference in control group patterns. Weikart and Klaus and Gray used non-treatment controls, while Karnes and Blank and Solomon used traditional nursery schools as controls. Hodges and Sprigle used both. The pattern formed by the traditional controls seems to be fairly consistent: performance on one sustained level throughout, or an increase that eventually levels off. The non-treatment groups show a more or less steady downward trend, but in Figures 2 and 5 there are unexplained rises even before any of them is exposed to public schooling. Neither author offers any explanation for these patterns, but in result analysis we must consider contamination of some sort. In Figure 2, for example, the same pattern of gains and losses exists for both groups, arousing a strong suspicion that some outside factor influenced results.

The non-comparability of the treatment and non-treatment controls made the present comparison more difficult. Nevertheless, the difference between experimental and control group means were plotted (Figures 8 and 9), giving a picture of the relative gains of experimental groups in each program. The

traditional and non-treatment programs were plotted separately.

The figures again clearly show strong program impact and eventual fade-out. Within the traditional-control cluster, Bereiter and Engelman and Sprigle achieve the same eventual gains. But Sprigle arrives at this height after only one year of treatment, while Bereiter and Engelman need two. This may be due to a motivational factor, considering the one-sided and repetitious nature of the Bereiter and Engelman approach. Both drop steeply after a one-year follow-up. The lack of fade-out in Hodges' program and the aforementioned methodological difficulties of his study make it hard to see what really happens here. Karnes' Ameliorative Program fares the worst, with the lowest relative gains and sharpest post-treatment drop. Blank and Solomon's program shows impressive short-term gains but the inextensiveness of the treatment and the lack of follow-up data give us an incomplete picture. On the basis of the existing evidence, there is no reason to assume that this program too will not show eventual drop in gains.

Within the non-treatment cluster, Sprigle again shows highest relative gains and least post-treatment drop, but once more the inextensive follow-up tells us nothing about long-term gains. In addition, Sprigle himself handled the teaching during the program's implementation, which suggests

that he may have strongly motivated the children. To explain the unusual configuration seen here (Figure 5), more data are needed. Of the two extended follow-up studies, Klaus and Gray seem clearly better than Weikart in terms of relative superiority to controls. But Weikart's experimental group always maintained itself significantly above its original pre-program level (Figure 1), while Klaus and Gray's experimental group has returned to its original level by third grade (Figure 2). To determine, therefore, which of these two approaches is more effective in terms of cognitive gains is really a matter of defining criteria for success and thus can not be decided conclusively on the basis of existing data.

Although we were unable to establish clear superiority for any one program, certain facts have emerged:

1) Despite possible experimental contaminations and expectancy effects, existing data confirm that intensive work with the culturally disadvantaged does yield some significant results;

2) There are no striking differences in cognitive gains between programs with widely differing theoretical and programatic orientations, so that a highly structured approach with an almost exclusive interest in language development may yield positive results, but is not necessarily as effective,

in terms of time needed to achieve gains and duration of treatment effect, as a more eclectic, less rigorously structured approach. For the moment, we seem to know only that the "how" is more important for success than the "what;"

3) Two-year pre-school programs do not achieve greater cognitive gains than one-year programs. This, combined with our knowledge that all program gains eventually fade out, leaves open the question of whether a heavy investment in early education is the best we can make. It seems, at present, to be pointless unless there is a parallel revision of elementary education as well, which may alone be sufficient to produce lasting cognitive gains;

4) Despite the absence of clear-cut data as to the effectiveness of summer programs and home visits as intervention methods, the success of the Klaus and Gray study suggests that these may yet become viable intervention techniques;

5) Similarly, despite possible contamination in his methodology, the success of the Sprigle program suggests that an informal approach to classroom structure, combined with a directive and cognitive curriculum, can also be a powerful intervention technique.

I SOURCE OF SOCIO-EMOTIONAL GROWTH

STRATEGY	PROGRAM	INPUT
1. Planned socio-emotional development	Kraus and Gray	State socio-emotional aims(achievement, motivation, persistence, delay of gratification, interest in school-type activities, identification with achieving role models) and plan activities toward achieving them. Often, same procedure will combine these with cognitive goals. Program also fosters effective teacher-student bonds.
	Hodges	Diagnose individual socio-emotional difficulties, provide attention, affection, and authority according to needs. Same procedure will usually combine socio-emotional and cognitive goals. Progress deals with fear, curiosity, anxiety and attentional abilities, as well as teaching proper social response.
	Bushell	Desired social or emotional response is defined, then rewarded with tokens. Does not describe specific procedures for eliciting these responses.
	Montessori	Aims at social co-operation and harmony in the classroom, even though it provides only little opportunity for social integration. Teaches appropriate social behaviors. Provides atmosphere of personal freedom.
2. Unplanned socio-emotional expression	Weikart	Uses socio-dramatic play, encourages free expression and exploration of materials.
	Bushell	Free-choice activities (where desired responses are unplanned), may allow for emotional expression and social interchange.
	Kelly and Nimnicht	Encourages creative exploration of materials.
	Sprigle	Non-structured part of work-day provides opportunity for social interaction and tries to establish effective teacher-student relationships.
	Traditional	Activities allow for creative, emotional, fantasy, and social expression.

3. Socio-emotional growth as part of cognitive growth	Bereiter and Engelman; Karnes	Emotional needs are met through cognitive gains only.
	Weikart	Does not plan for emotional needs, feels that these are met chiefly through the cognitive curriculum, but does allow for free expression (see 2).
	Sprigle	Like Weikart, does not plan for emotional needs, feels that these are met chiefly through the cognitive curriculum.
	Kelly and Nimnicht	Aims at developing a positive self-image and a trusting relationship with an adult, which is achieved by realizing cognitive goals.
	Blank and Solomon	Cognitive activities are planned and responses called for according to diagnosed emotional difficulties of the child.

II GAMES AND MATERIALS

STRATEGY	PROGRAM	INPUT
1. Eclectic materials	Traditional	Traditional collection of games and materials that reflect no single ideology -- may be both manipulative and expressive in function.
	Bushell; Klaus and Gray; Hodges; Blank	Traditional games and materials are used when relevant to specified aims.
2. Specially prepared materials	Weikart	Combines use of traditional games toward specified aims, together with socio-dramatic play, manipulative materials based on Piagetian principles of development, and motoric activity.
	Sprigle	All cognitive activity is based on sequenced (according to Piagetian theories of stage development) and manipulative games that call for active participation of the child.
	Karnes	Manipulative and multi-sensory materials, many of them motoric, whose chief function is to elicit verbal responses.
	Kelly and Nimnicht	Manipulative and multi-sensory, self-correcting materials. "Language Master" (sound recording machine) and "Tutoring Booth" (includes electric typewriter) give heavy language emphasis.
	Montessori	Sequenced, self-correcting and self-pacing materials are devoted chiefly to classification and descriptional abilities. Aimed at motor, sensory and language education through reading, writing and arithmetic.
3. No games	Bereiter and Engelman	Materials, when used, have demonstrative rather than interactive function, center on arithmetic (counting) and language (its structural and logical components).

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III USE OF REWARDS

STRATEGY	PROGRAM	INPUT
1. External physical rewards	Bereiter and Engelman; Klaus and Gray; Hodges	Concrete rewards quickly replaced by verbal rewards.
	Blank	Materials being used may be given to child when he complies with cognitive demands made in use of the material.
	Bushell	Use of tokens that enable child to "pay" to participate in a desired activity. Skinnerian reinforcement principles are prominent. Increasing time intervals between token distributions.
2. External non-physical rewards	Weikart; Bereiter and Engelman; Bushell; Klaus and Gray; Traditional; Hodges; Karnes	Teacher approval and attention.
3. No external rewards	Kelly; Sprigle; Montessori	Inherent satisfaction in success is sole source of reward. In these programs, teacher attention is not strongly linked with success.

IV LOCUS OF CONTROL

STRATEGY	PROGRAM	INPUT
1. Teacher is chief initiator	Bereiter and Engelman; Bushell	Pace and content of cognitive activity is determined by the teacher.
2. Teacher and child may both be initiators	Sprigle	Two classroom patterns exist -- unstructured and structured. In the first, the child has freedom and choice of activity. In the second, the teacher directs his use and understanding of the sequenced cognitive games, but the child is free to respond creatively to them as well. The child's creative responses are dealt with by the teacher.
	Blank and Solomon; Klaus and Gray; Hodges	Teacher initiates and maintains control over direction of activity but at times may use child-initiated activity to arrive at her own goals.
	Weikart	Child may choose from among several activities, each of which has teacher-set goals.
	Karnes	Goals are set by the teacher, but are reached by responding to the child's reactions to manipulative materials.
3. Child is chief initiator	Traditional	Child-initiated activity is dominant, but teacher may direct child to activity according to an assessment of his needs. Teacher is chiefly a resource person.
	Kelly and Nimnicht	Teacher controls materials brought into the classroom and sets rules for correct use. But child is free to choose his materials and is encouraged to explore them prior to using them toward a specific aim. Teacher cast more in responsive than didactic role.
	Montessori	Teacher controls introduction of materials into classroom and sets rules for correct use; child is free to use them until mastery, at which time teacher will direct him to other materials. Teacher cast in role of non-authoritarian model.

V INTENSITY

STRATEGY	PROGRAM	INPUT
Work with small groups Adult:child ratio	Sprigle	Homogeneous groups of 2, 3, or 4 children, for 15-20 minutes a day, when they are encouraged to try out cognitive games at their own pace. Total number of children in classroom: 24. Use of aides not mentioned.
	Karnes	Homogeneous groups of 5 children meet for three 20-minute structured learning periods a day. Total number of children in the classroom: 24.
	Bereiter and Engelman	Homogeneous groups of 5 children meet for three 20-minute structured learning periods a day.
	Hodges	Individual pupil diagnosis; use homogeneously deficient groups but number not specified. Adult:child ratio 1:14. Use of professional consulting staff, such as psychologists, social workers, curriculum specialists, medical team.
	Kelly and Nimnicht	Self-directed activities -- almost no group or class work.
	Blank and Solomon	1:1 teacher-student ratio.
	Klaus and Gray	Homogeneous groups of 5-6 children.
	Weikart	Does not specify size of small groups used, but does mention their use.
	Montessori	Self-directed cognitive activities.
	Bushell	Does not specify small group size; behavioral data gathered for each individual child.
	Open School	Small groups formed spontaneously -- child may work alone as well.

Parental involvement	Klaus and Gray	Provided continuity for summer preschool, with materials provided for the child. Worked on parents' skill and attitude.
	Weikart	Parents taught what and how to teach children at home.
	Karnes	Mothers taught how to make instructional materials and how to use them in teaching children at home
	Sprigle	Monthly parent discussion groups about classroom activities.
	Gordon	Parent instruction toward activities aimed at stimulating early infant motor growth.
	Infant School	Parents encouraged to visit and observe school.
Treatment time	Sprigle	One academic year: mornings.
	Karnes	Two academic years: two hours a day.
	Bereiter and Engelman	Two academic years: two hours a day.
	Hodges	One academic year: mornings.
	Kelly and Nimnicht	One academic year: mornings.
	Blank and Solomon	Four months: five times a week for 20 minutes.
	Klaus and Gray	Two and three years: ten summer weeks (4 hours a day) plus weekly home visits all the rest of the year.
	Montessori	One academic year: mornings.
	Bushell	One academic year: mornings.
	Open School	Child may continue in same setting through 2nd and 3rd grade; length of school year may vary.
	Traditional	One academic year: mornings.

Figures 1-6: Mean scores for experimental and control groups on the Stanford-Binet test, for seven compensatory education programs.

Figure 1: Weikart program.

Figure 2: Klaus and Gray program.

Figure 3: Karnes and Bereiter - Engelman programs.

Figure 4: Sprigle program.

Figure 5: Hodges program.

Figure 6: Blank and Solomon program.

Period of exposure to program indicated by arrow.

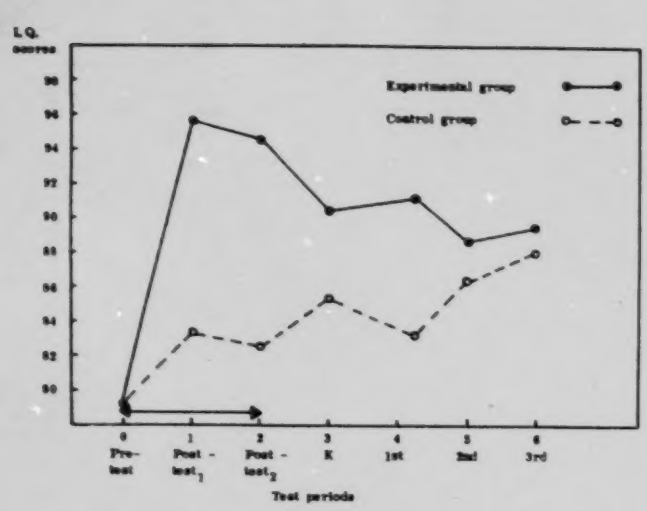

Figure 1: Welkart program.

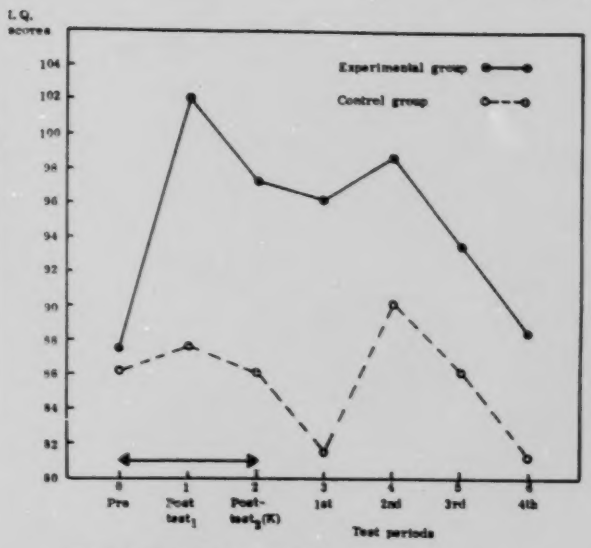

Figure 2: Klaus and Gray program.

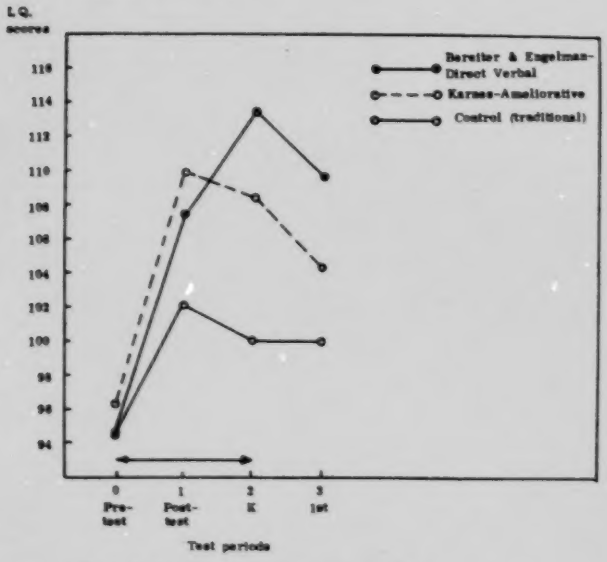

Figure 3: Karnes and Bereiter-Engelman programs.

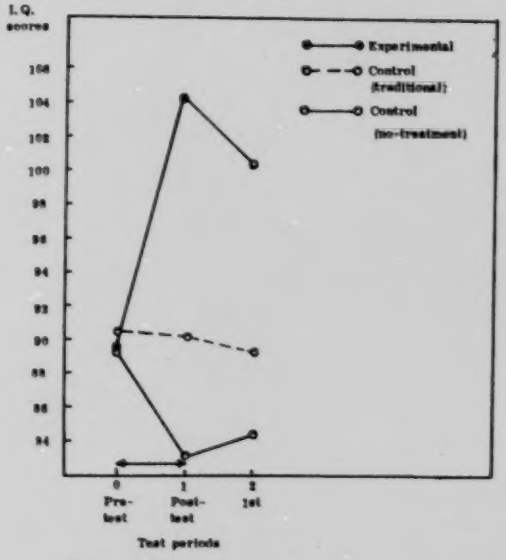

Figure 4: Sprigle program.

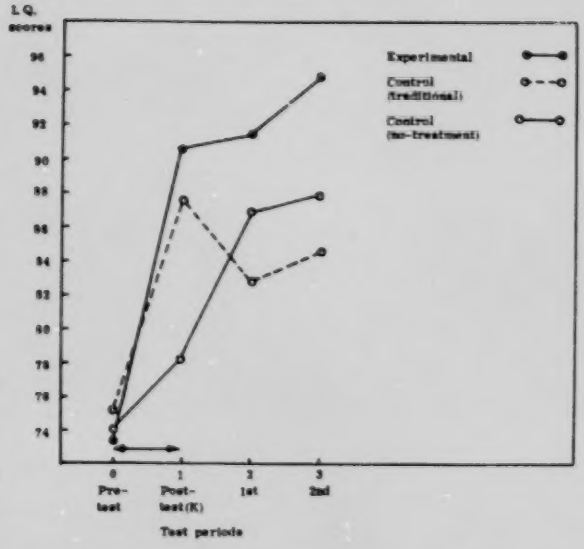

Figure 5: Hodges program.

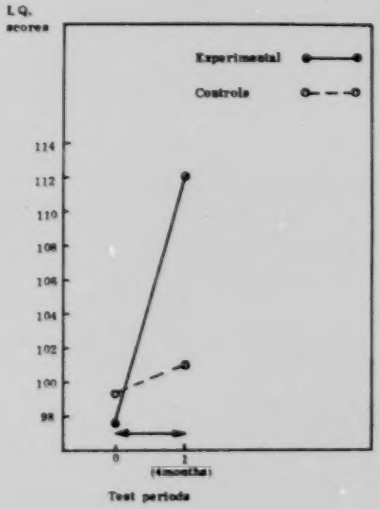

Figure 6: Blank and Solomon program.

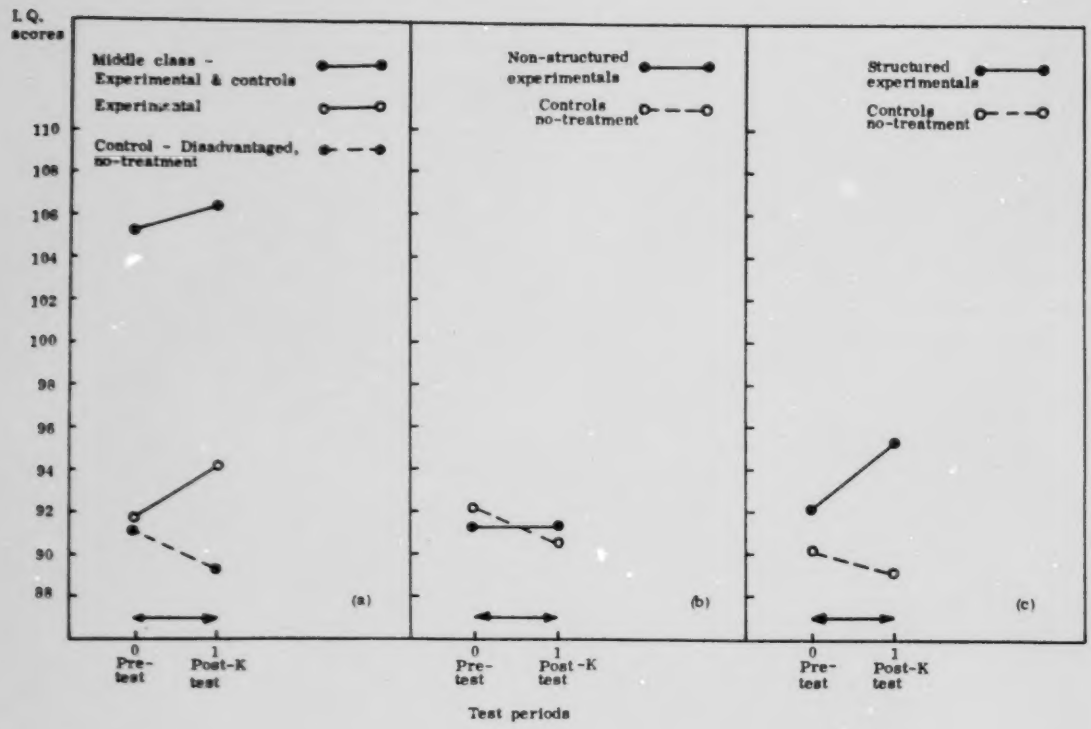

Figure 7: Mean scores for experimental and control groups on the Stanford-Binet test for eight kindergarten programs in New-York State (DiLorenzo).

(a) Structured and non-structured experimentals combined.

(b) Non-structured experimentals compared with no-treatment controls.

(c) Structured experimentals compared with no-treatment controls.

Period of exposure to program indicated by arrow.

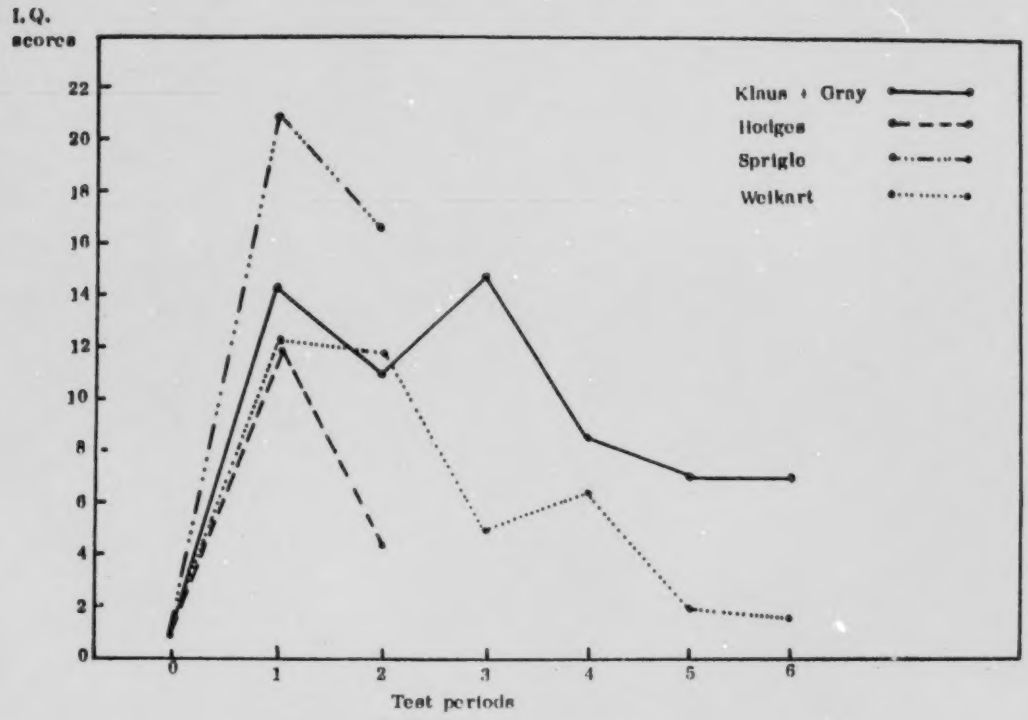

Figure 8: Difference between experimental and control means for four programs using no-treatment controls.

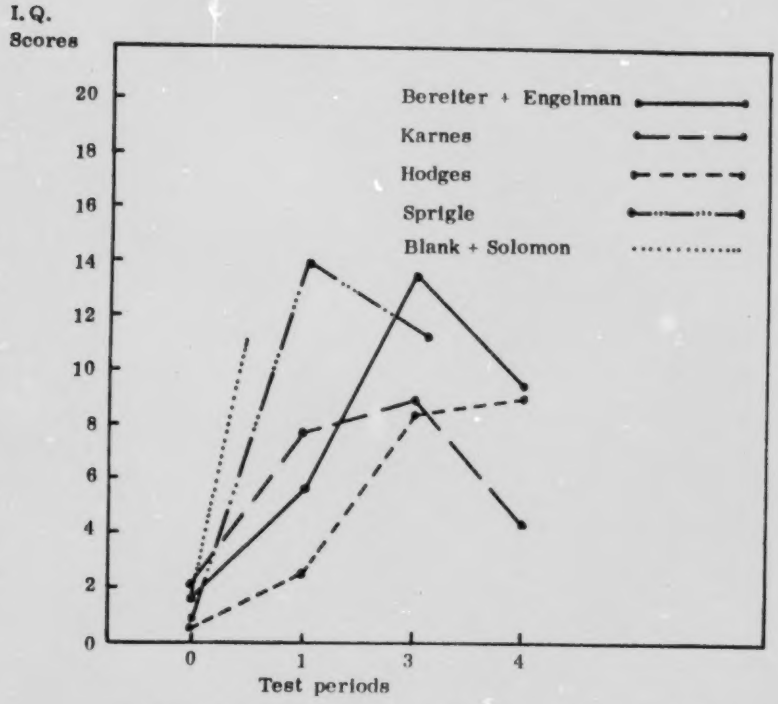

Figure 9: Difference between experimental and control means for programs using traditional treatment controls.

BIc. Conclusions

Our inability to find differences in results between programs and the persistent loss of gains over time lead us to several possible conclusions about future educational research and policy.

This is not nearly so pessimistic as it appears, since existing data show rising cognitive performance of disadvantaged Israeli populations, apparently independent of specific educational intervention. Other variables are at work -- social, economic, political, perhaps even medical -- and the educator may be deluding himself by thinking that his is the unique and critical contribution.

Second, there is clear evidence that program gains are a result of teaching to the test, not of really influencing cognitive structure in any way. Gains, in other words, result from teaching the child the skills needed to succeed at a specific level of the Stanford-Binet, which he indeed learns well, but which do not serve when he needs to score successfully at later levels. If we accept this interpretation of program results we can conclude either that we must coach the child at successive levels of difficulty - the Follow-Through idea - or that we accept the fact that cognitive structural change cannot be induced by specific educational intervention and thus concentrate upon areas of development more amenable to change, such as

social interaction. This latter is the conclusion that such Piagetians as Kohlberg (1970) have drawn from the Head Start experience. In suggesting that complex cognitive training of certain populations be abandoned, he is faintly echoing Jensen's idea that because IQ differences are not a result of environmental variations but of genetic factors, compensatory education should be directed toward specific academic skills dependent upon mental abilities more amenable to change than IQ.

Third is the belief that real and significant increases in cognitive ability may be possible if they are fostered at a later stage. Kohlberg, for instance, argued that not only does the child's sensitivity to stimulation increase with age, but also that the disadvantaged child when young gets sufficient stimulation to develop, but needs more and receives less when he grows older. Hunt (1969) also feels that compensatory education cannot succeed because it begins too early, especially since many skills can be learned quickly in adolescence but are inefficiently taught. Coleman has explained this in terms of the greater adolescent understanding of the social and economic value of education, which introduces a motivational factor not present in preschool or elementary years (Coleman Report:1966).

This does not mean, however, that early childhood compensatory education did not succeed because it began too

soon. A huge literature informs us that compensating as early as possible, even at a few weeks or a few months of age, is vital. Not only does the lower-class - middle-class intellectual gap apparently increase with age (Deutsch's 1967 cumulative deficit idea), but certain possibilities for change are seemingly greater if we reach the child when he is more flexible, when he is still performing more closely to the desired norm than he would be if left alone.

B2. Educational and Social Aspects of Homogeneity and Heterogeneity in Secondary Education

Since homogenization is a pre-condition for nearly all compensatory programs, we have chosen to summarize the relevant literature. The assumption, to be sure, that only by segregating disadvantaged students can special inputs be provided, has been criticized by those who believe that segregation fosters a negative self-image and reduces motivation.

Homogenization is the general term for classifying and maintaining students in groups according to their ability, supposedly to make teaching and learning more effective. It can be initiated at the level of the educational system and termed "organizational differentiation," or at the school level and termed "educational differentiation." Organizational differentiation means that students are distributed among general, vocational, "modern," or comprehensive

schools; educational differentiation that they are in classes with students of similar ability. "Streaming" in English schools is one example of the former; "grouping" in Israeli schools, of the latter.

As is true in other areas, the main thrust of policy as well as of research here is cognitive, in spite of some attempts to examine other variables.

Homogeneous Grouping in America

Research in homogenization, begun in 1929 (Rock:1929, Miller and Otto:1930, Turney:1931, Billet:1932, Wyndham:1934), yielded two general conclusions:

1) No statistically significant differences were to be found in the achievement of students in homogeneous groups as compared with that of students in heterogeneous groups;

2) At the same time, homogeneous grouping was slightly advantageous for students with IQ's of lower than 90, provided an appropriate curriculum was introduced.

In 1950, Otto summarized the existing research, concluding that:

1) Homogeneous grouping was preferable, especially when standards, content, and method were properly adjusted;

2) Most teachers and parents favored such grouping;

3) The weakest students gained the most, the strongest gained nothing and possibly lost;

4) Variance in achievement in classes divided into three homogeneous levels reached 80% of the variance in heterogeneous groups.

Otto's findings are contradicted in part by those of Hartill (1936), who discovered for the population as a whole no difference between homogeneous and heterogeneous groups. Heterogeneous grouping was advantageous for superior students, homogeneous for average, and neither one nor the other for weak students.

In spite of its lack of consistency, early research seems to favor homogeneity, indicating that it helps the weak or average student. Later studies, however, indicate that the absence of intellectual stimulus provided by superior students adversely affects the homogeneously grouped weaker ones. Beyond this, there is no clear evidence that bright children suffer in heterogeneous frameworks.

The roots of an orientation popular in later research were planted in the 1961 survey made by Eash, a man who considered grouping dangerously selective. He predicted that since middle-class children quite early find their way into the higher-ability groups, social integration and equal educational opportunity are threatened.

The most sophisticated in-depth study of grouping in the United States, made by Goldberg and her colleagues (1966), attempted to examine academic achievement by pupils of differing ability as it is affected by 1) bright or slow students, 2) ability range in the classroom, and 3) the place of the group relative to the ability range of the entire class. The authors concluded that, in terms of all the variables examined, the effect of grouping is minimal, and that narrowing ability range in the classroom does not affect achievement.

Research indicates that the effects of homogenization should be examined in conjunction with curriculum changes. In one of two American studies, Drews (1963) considered the effect of homogeneous grouping in ninth-grade English, focusing on teacher control and curriculum adaptation. In the course of his work, he introduced observation as another tool for evaluation. Four hundred and thirty-two students at three IQ levels were chosen from four schools and randomly divided into a total of twenty-two heterogeneous and homogeneous groups, each encompassing three levels of ability. The teachers were selected on the basis of their principals' recommendations, each teacher receiving bi-weekly training and taking responsibility for one heterogeneous class and two homogeneous classes. Curriculum and teaching materials were adapted to the various levels.

Tests of the pupils at the beginning and the end of the school year revealed no significant differences in any of the groups, although it was apparent from observation that participation was greater in homogeneous than in heterogeneous classes. Although no vocabulary differences ensued, higher-level students in homogeneous classes tended to use more words than the same level students in heterogeneous classes. This was true also of low-level students, but the opposite obtained in the middle level, thus making a case for homogeneity, particularly at the extremes of ability. It is also possible to conclude that standardized tests are limited evaluative tools, since observation alone showed vocabulary differentiation.

Another American scholar, Borg (1965), studied the effects of two types of grouping: the first used three IQ levels and speeded up or slowed down curriculum according to ability; the second used random grouping and adapted curriculum according to individual needs. The sample included four thousand students from five classes, and data, collected over a period of four years, ranged from Grade 4 through Grade 12.

Of fifty-four achievement comparisons in Grades 4 to 6, twenty-eight significant differences were noted, nineteen favoring homogeneous and nine heterogeneous grouping. Borg attributes the fact that fifteen of the nineteen favorable

homogeneous comparisons were found in the first year to the Hawthorne effect, which operated in the early stages of the experiment. The advantages of homogenization seem to fade with time. Borg's results indicate that homogeneous grouping at both high and low levels shows a few small advantages; none at the middle level.

American research indicates that narrowing ability range does not significantly affect academic achievement, at least in Grades 5 to 9; that homogeneous grouping is slightly preferable for students of higher ability and that the numerous insignificant results suggest that neither homogeneity nor heterogeneity, as defined in American research, serves much purpose.

Streaming in England

In England, streaming channels children of similar ability into homeroom classes which thus become homogeneous, where they study most of the curriculum together. Streaming is a process of high-intensity homogenization, certainly higher than grouping in America, since the division between units or classes is sharper and the sense of belonging to a particular level less ambiguous.

Blandford (1958) interpreted the increase over time in dispersion of grades (standard variation) in streamed schools as a widening of the gap between the higher and the lower streams. Daniels (1961) on the other hand, following

over four years the achievement of five hundred students in two junior schools, one streamed, the other not, found the average achievement in the non-streamed schools significantly higher and the variance narrowed. He concluded that the advantage grew out of advancing stronger students without hindering weaker ones.

Barker-Lunn's (1970) study of streaming for the Plowden Committee examined the impact of both types of schools on personality and social and intellectual development of junior-high-school students. She learned that she could distinguish streamed from non-streamed schools by virtue not only of organization but also of the educational approach of the teachers. In non-streamed schools the staff attitude was more progressive toward the students and toward discipline, testing, and self-expression, while in streamed schools the staff was conservative about streaming itself, as well as about selection processes, physical punishment, discipline, manners, cleanliness, teaching techniques, and testing. Average achievement in streamed schools, however, was higher (but only by about one-third of a standard deviation). The author's explanation is 1) that standard tests in streamed schools may be geared to a more traditional philosophy of teaching, and 2) that, despite efforts to match schools, children of a higher social stratum were more numerous in the streamed schools.

A follow-up experiment to measure the effect of organization and type of teacher on pupil performance indicated that streamed and non-streamed schools were equally advantageous. Other external factors, the authors therefore concluded, which were not subject to control, must account for the variance in the two samples. The study supports the American conclusion that grouping may in fact be irrelevant to learning. It suggests further that neither the kind of organization nor the so-called right type of teacher within it has any discernible effect on pupil performance as measured by objective tests.

Although the author makes no effort to analyze the differential effect of various streams, 18% of the comparisons reveal significantly greater grade distributions (standard deviation) in streamed schools, whereas none of the comparisons show similar results in the non-streamed schools. It is possible, however, and bears investigation, that the poorer achievement of the weaker student accounts for the dispersion.

In sum, then, it appears that:

1) Although English streaming is of a higher intensity than American grouping, research indicates that the treatment variable has had no more intense effect;

2) All research concludes that dispersion of grades around the average increases more markedly with time in

streamed than in non-streamed schools; either streaming tends to increase dispersion or non-streaming to decrease it. This suggests a widening of the gap between higher and lower streams or a narrowing between higher and lower ability students in non-streamed schools. Such conclusions, however, must be systematically examined.

Grouping in Israel, 1968-1970

(See also Chapter I, Section A3)

Homogenization in Israel is usually of low intensity, and accords with three principles:

1) Social activities and most academic study takes place in heterogeneous classes;

2) Academic levels, in Hebrew, mathematics, and English, are assigned not according to IQ or aptitude but according to achievement;

3) Each subject is theoretically grouped independently. (In practice it has been noted that 50% of the students are in the same level in all subjects.)

Guttman et al. (1972) assumed, in their study of the effect of grouping on academic achievement, that since grouping narrows the ability range and creates a uniform pace it should improve achievement. When they examined achievement on the basis of ability levels, sub-populations, and subject matter

they discovered: 1) that Level A, the top group, benefited slightly more from grouping, especially among disadvantaged pupils; 2) that Level B benefited slightly more from heterogeneity, especially among middle-class children, and markedly in mathematics (the benefit to mathematical achievement was true also of the disadvantaged, for whom homogeneity was more effective in Hebrew); and 3) that Level C, the lowest, benefited from neither method.

Disadvantaged pupils at all levels benefited from homogeneity in Hebrew and from heterogeneity in mathematics. Although the impact on middle-class students is small, they benefited slightly in heterogeneous Hebrew classes.

None of these differences were, however, statistically significant. Beyond this, the study did not control for such variables as family background and ability within each level.

We must conclude that neither homogeneity nor heterogeneity in Israel has an important or consistent impact on academic achievement and does not narrow the ability range. Studies measuring organizational manipulation, teaching behavior, and curriculum also failed to chart significant results. But the difference in intensity, between weak and strong homogeneity, cautions us to avoid generalization. Research focusing on weak homogenization suggests little consistent or positive effect upon achievement, except for

the slight narrowing of the ability range in mathematics at the highest level in Grades 7 and 8. If, however, we consider the studies of high-intensity homogenization, we can conclude that although it has no consistent, positive effect, it does have a differential effect on the dispersion of grades in each ability level.

Studies of middle- and high-intensity homogenization point to increased variance in academic achievement of higher-ability students, and depressed achievement of lower-ability groups.

We consider that organizational manipulation in terms of class composition results in no important changes in achievement, especially among the disadvantaged. Examination of changes of a more structural nature targeted toward enhancement of opportunity for the disadvantaged seems to be called for. This brings us to the subject of integration of students from different ethnic and class backgrounds.

B3. Research on School Integration in America

The forces behind school integration, wherever practiced, are both educational and socio-political. The expected output is improved achievement on the part of disadvantaged students who have been exposed to role models and who have benefited from such inputs as the better teachers and more modern facilities demanded by middle-class parents.

Unlike early childhood programs, which are directed almost exclusively toward cognitive development, and grouping, which is an organizational manipulation underlying compensatory education, itself concerned mainly with cognitive development, integration is a change of a more structural nature, devised to affect such resources as behavioral norms, social relationships, and skills, as well as achievement.

Integration and desegregation became key words in American educational theory and practice, in the wake of both the 1954 Supreme Court decision on integration of schools, and the Coleman Report, which summarized the findings of a survey on equal opportunities in education in America.

Despite the wealth of research and the literature amassed during the past twenty years, there remains considerable confusion over such terms as desegregation, racial equality, non-segregation, and integration. According to Pettigrew (1968), an important distinction exists between desegregated schools and integrated schools. Desegregation refers to a situation in which more than half of the pupils are white, with various ethnic minority groups making up the remainder. Integration, on the other hand, implies more than mere recomposition of the school population and demands an activities program that will reduce racial tension and create conditions conducive to school success. Integration refers to institutional dispersion of disadvantaged students in different programs and curricula for the purpose of achieving

greater equality of educational opportunity.

As an independent variable for research, certain characteristics of integration must be analyzed:

1) The nature of integration, which ideally consists of bringing together students of different groups with especially adapted educational measures both in the social and the academic fields, as opposed to mere administrative mixing of students;

2) The locus of initiative, which, if in the community, suggests parental involvement and positive attitudes toward change, thus perhaps assuring better chances for success than initiative imposed by an outside authority;

3) Proximity of populations, which is the heart of the busing dilemma. Successful social integration certainly is encouraged by proximity and the opportunity to interact outside of the formal school framework. According to Haggstrom (1963), Blacks in integrated schools gain more emotionally if they live in integrated neighborhoods where positive attitudes toward other racial groups can be cultivated;

4) Location of the integrated school, which relates to whether the disadvantaged students should be integrated into middle-class schools, the middle-class students into disadvantaged schools, or a new school established in a "neutral area." Evidence indicates that the school's status

and even its name affects pupil achievement, just as the school's physical location affects the integration process.

The Effect of Integration on Several Dependent Variables

Although most of the research has been concerned with the effect of integration on the achievement of disadvantaged students, efforts have also been made to learn whether middle-class student achievement has been affected. Research in integration can thus be said to have concentrated upon the general advancement of all students and upon the advancement of the disadvantaged in particular. The relevant dependent variables that have been studied in order to answer the questions raised by integration are: 1) intellectual, in terms of cognitive development and academic achievement; 2) personality, in terms of motivation, self-image, internal control, educational and vocational aspirations, attitudes, and level of anxiety; and 3) social, in terms of conformity and inter-group interaction.

1. Intellectual Variables

Research results, concentrating mainly upon the intellectual factor, indicate that integration increases the likelihood of academic success. The most significant findings concerning the relationship between integration and achievement are those of the Coleman Report, which concludes that:

1) The greater the percentage of Whites, the greater the achievement of pupils in all ethnic groups;

2) The relationship between the percentage of Whites in the class and minority group achievement is higher in the higher grades. Specifically, the academic achievement of Blacks begins to be affected by class composition at Grade 6 and increases thereafter;

3) Improvement in achievement is not immediately observable and is directly related to the length of time spent in the integrated school.

Coleman, in fact, found that class composition affects pupils' performance more significantly than any of the other school-factors: curriculum, teacher, teaching-aids, the physical state of the plant.

Warden (1968) offers a psycho-social explanation for the impact of the socio-economic mix, noting the importance of the age group on the development of self-image among children. Not only do disadvantaged children have relatively few social contacts, but the minimal contribution of the family's social status to the children's motivations, expectations, and confidence lends great importance to social pressure among peers.

Criticism of the Coleman Report is largely concerned with such methodological weaknesses as poor sampling or insufficient control of background factors. Scholars like

Bowels and Levin (1968) and Minkovitz maintain, on the other hand, that a selection factor encourages the entrance into integrated schools of children whose families were a priori upwardly mobile.

McPartland and Sprehe (1968), using their own analysis of Coleman's findings, conclude that school composition is less important than class composition. At the classroom level the positive effect of integration on achievement is less dependent on family background. They observe that the average Black achievement increases in accordance with the number of Whites in the class. While they agree that the greater the number of Whites in the school the greater the effect of class composition, they point out that the achievement of Blacks in predominantly Black classrooms is not affected by school integration.

Weinberg (1970) summarizes much of the research, concluding that findings are generally positive in terms of the effect of integration on achievement. The claim that middle-class children have not only not suffered in integrated schools but that they have benefited is amply supported by Pettigrew (1968), Hansen (1960), Lesser et al (1964), and Klein and Eshel (1972). Studies by Marcum (1969) and Wolman (1964) are among the exceptions which find no improvement among experimental groups.

2. Personality Variables

Among the personality variables assumed to be crucial to school success are educational and vocational aspirations. (See Chapter II: Vocational Education.)

Research in the United States shows an exceedingly high, often unrealistic level of aspiration among Blacks, particularly in non-integrated schools, and shows furthermore that integration often reduces aspiration to a lower and presumably more realistic level. Haggstrom (1963), as well as McWhirt (1967), Stinson (1963), Meketon (1966), and Singer (1966), found a more positive self-image among disadvantaged students in integrated situations. Bienvenue et al. (1969), however, reached the opposite conclusion, noting also a higher degree of anxiety among Blacks in integrated schools.

Level of aspiration, self-image, and anxiety are intervening variables, which determine the effect of integration on pupil performance.

Coleman (1966) noted that whereas aspirations are generally high among Blacks, their self-image does not differ greatly from that of Whites. Blacks, however, seem to have a much lower sense of fate control, a personality facet which he feels has important impact on the educational process, and one which is ameliorated when the percentage of Whites in the school is high.

One of the most comprehensive and systematic studies of non-intellectual factors in pupil performance was conducted by I. Katz (1967) to determine what factor did indeed influence the academic performance of the disadvantaged. Katz denies the common assumption that school failure among the disadvantaged results from low achievement-motivation or standards, but suggests that because of defective socialization the child fails to internalize appropriate reinforcement mechanisms. He therefore depends more heavily upon classroom models than upon personal motivation.

3. Social Variables

Studies of social interaction in integrated schools have recorded, at best, minimal contact between Blacks and Whites, at worst, rejection and even mental and physical cruelty toward the Blacks, making it appear once more that contact alone changes nothing (Chesler and Segal:1967, Duroyaiye:1969, Bradley:1964). Hostility probably prevails in the higher grades, where integration is slower and more difficult (Bernard:1958).

The apparent correlation between social status and teacher evaluation, self-image and academic performance makes it imperative to direct and develop social relationships in mixed classes. Pettigrew considers interracial acceptance an important intervening variable in the educational process.

Summary

Although the results of American research in integrated education are sometimes inconsistent, the following conclusions can be drawn:

1) In an attempt to arrive at a more precise definition of integration, two distinctions have been made:

a. In terms of the relevant unit for recomposition some educators believe that the clear determinant is composition of the class (or of any other study unit), rather than the school. Thus a school in which classes are grouped homogeneously is not fully integrated;

b. A distinction is also drawn between integrated and desegregated schools. When schools try to absorb disadvantaged students both socially and psychologically, results are invariably better than when they merely mix student population.

2) Most research indicates that integration improves performance among the disadvantaged and does not impede it among the middle class. Beyond this, integration affects not only academic achievement but personality and social variables as well.

3) Since the chances of positive results are enhanced by long integrated schooling, integration should be initiated as early as possible.

4) Family and community support are important determinants of the school's impact on the child.

5) Many variables in the integration process require further study:

a. geographic and demographic factors,

b. optimum percentages in class composition,

c. curriculum changes,

d. teacher standards,

e. optimum time period,

f. differences in impact of integration on achievement.

The full effect of integration can really be assessed when those students who were first exposed to integrated schools reach the point either of vocational choice or further education. At that time it will be possible to measure long-term changes in achievement, values, and the ability to assume adult responsibility.

We consider integrated schooling the most interesting of the examples discussed and a unique attempt to manipulate the system, adjusting it to the multiple background needs of different types of students. Compensatory programs and homogenization, on the other hand, imply refusal to change the selection process in school and preference for manipulating the students rather than the system. The result is

not differentiation but the establishment de facto of less effective educational channels, which perpetuate inferior educational conditions for the disadvantaged.

CHAPTER II

VOCATIONAL AND TECHNOLOGICAL EDUCATION IN ISRAEL

The more advanced the society, the greater the demand for skilled manpower and the fewer the chances for successful social and economic integration of the disadvantaged. The educational system, like other institutions, is nevertheless expected to respond to economic demands while at the same time attending to the specific problems of the disadvantaged.

In many countries a high proportion of disadvantaged pupils are being channelled into vocational education. Since vocational education is usually committed to filling the needs of the economy, it must face the challenge of preparing highly skilled manpower from a population with limited capabilities. The dilemma is that chances to help less able students are limited if academic requirements are raised in order to satisfy economic needs, and that chances to serve the economy are limited if requirements are lowered.

The vocational and technological education system in Israel presents an acute example of such a dilemma. We will be particularly concerned with the qualitative and quantitative alternatives offered the disadvantaged adolescent who is about to make a choice that may determine his social, economic, and occupational future.

The degree to which a person can in fact choose depends on his own resources and the resources made available to him by society. The more open the society and the more resources the individual commands, the weaker will be the impact of pre-determined factors and the stronger that of such elements as personal merit, achievement, and motivation.

We are going to consider three possible choices: formal vocational education, employment, or detachment from all institutional frameworks. Each poses specific problems. Formal vocational education is the least problematic and, in terms of opportunity, the most flexible. Even though it lessens the chance of remaining at the bottom of the socio-economic ladder, it nonetheless presents serious obstacles to the disadvantaged. Immediate employment, on the other hand, by eliminating the main channel for mobility, restricts the individual to marginal roles. The last alternative, clearly the most problematic, impedes the chances not only for mobility but also for employment by reducing the capacity to adjust to a work or institutional situation.

What alternatives, both educational and occupational, exist within these directions, and how effective are they in increasing chances for mobility?

The researcher, evaluating different activities or planning new ones, has several jobs to do:

1) General social research, in order to locate the determining variables in the process of occupational allocation, and to distinguish fixed conditions from variables which are subject to change by education, in the broad sense of the word;

2) Examination of various populations to pinpoint their deficits and advantages;

3) Definition of concrete problems, which must be dealt with by means of education, and development of operational principles (planning of means);

4) Examination of theory on the basis of action research before applying these principles on a wide scale;

5) Establishment of criteria to evaluate the effectiveness of various activities;

6) Specific examination of various frameworks and the system as a whole, based on pre-determined criteria (i.e., to what extent are the various frameworks coordinated and to what extent is the effort to solve problems comprehensive?);

7) Location of specific problems for each framework and for the system as a whole, and definition of general problems of operation;

8) Suggestions for improvement (planning).

Although these conditions obtain in general for analysis of educational intervention, they are especially relevant

for vocational education. Vocational education is more strongly linked with processes outside the educational system - as for example the economy - than is general education. Research must therefore be broad, encompassing all of the outlined variables and problems.

A. The Variables Which Determine Occupational Role

Such variables as ethnic origin, length of time in the country, level of parents' education, economic status and family size, and place of residence affect occupational allocation. These variables are of course not independent of each other, and the importance of each depends strongly upon the opportunities offered by society. We shall not discuss these variables in depth because many studies focus upon their correlation with occupational status.

We must, however, refer briefly to two surveys conducted by the Authority for Manpower Development of the Israeli Ministry of Labor (1967). The first of these, concerned with people seeking employment in 1967, a year of economic slowdown, revealed that the Eastern population was particularly affected, mainly because its members belonged to the lower social strata. The survey further indicated that the longer the time of residence in the country, the fewer were the chances for unemployment.

Although Israelis today are generally fully employed, this situation is not stable and the question of who will suffer in times of unemployment is therefore relevant.

According to a Ministry of Labor survey of seventeen-year-olds in Israel (1968), the level of education of both first- and second-generation Eastern youth is lower than that of comparable youth of European origin. This correlates with the lower inter-generational educational mobility of the Easterners as compared to that of Westerners. Eastern youth, the survey shows, is largely preoccupied with work, Western with study, an imperative, in our view, for relatively high occupational status.

The survey finds, not surprisingly, Eastern youth in unskilled jobs, Western in skilled ones. The further fact that most of the Israeli- and European-born live in urban areas and their Eastern-born counterparts in poor rural locales adds another facet to the clear correlation between ethnic origin and occupational allocation.

A survey that examined the factors affecting adjustment to work pointed out that the lower the socio-economic status the lower the adaptability, steadiness, and satisfaction, (Shirom, et al:1971).

Of two studies concerning the effect of place of residence on occupational allocation, the first (Chilik:1968) examines the correlation between the size and degree of

isolation of the development town and the activities and predispositions of local youth. Such predispositions are, in our view, indices of future occupational roles. According to the study, the opportunities provided the youth by the town play an important part in determining what the first jobs will be. The size of the town and its proximity to urban centers affect adolescent choice: whether to go to work, to vocational school, or to continue general education, either in or out of town. Those who live in the larger towns tend to continue their studies; those in the smaller, to go to work. In the larger towns, general education is preferred; in the smaller and non-isolated ones, vocational education; in the isolated towns, studies tend to be continued outside. In the last instance, therefore, socio-economic mobility is directly determined by geography.

The second of these studies (Ronen:1968) examines occupational aspirations of youth in depressed areas as opposed to those in established neighborhoods. In spite of the inconclusive results of this study, due to methodological problems, the distinct difference in aspiration is significant. It seems that the place of residence generally affects both the socialization processes which determine personal variables related to occupational allocation and the alternatives that are offered. In fact the gap between periphery and urban population is widening.

> In the city we find processes of status differentiation and mobility while at the same time in development towns a process of negative selection has begun - the few that have the necessary qualifications for rising on the ladder of social mobility leave the town and move to the city. The town becomes therefore a homogeneous mass of individuals lacking qualifications and any hope of advancement through channels of mobility. (Chilik)

Although the size and degree of isolation of the small town may affect occupational alternatives, the urban setting differs from the town in that it is the place of residence but not necessarily the place of work. In the case of the development town, however, the farther it is from the city, the greater the dependence of its inhabitants upon internal occupational opportunities.

Whereas the preceding variables seem more or less fixed, there are variables in occupational allocation which seem more subject to individual change. These include: acquisition of formal education and achievement and of vocational skills (theoretical and practical); understanding of institutional modes of activity; discipline, work habits, and the ability to relate to authority; values and attitudes toward education and work; vocational aspiration and motivation; self-image and sense of fate-control or sense of mastery over one's environment.

These variables are not only interdependent, but are determined at least in part by the process of socialization.

Our assumption, yet to be conclusively established, is that many of these variables are subject to change in adolescence by means of education, broadly speaking, and particularly by vocational education. Even natural ability, although apparently hereditary, can be well or poorly utilized, depending upon how it is affected by the socialization process. The challenge for educational frameworks is therefore to neutralize as far as possible the impact of more or less fixed socio-economic variables on the socialization process, thus increasing the chances for utilization of potential and for mobility.

Israeli research has not yet fully explored the influence of different variables on employment allocation or the interaction between the different variables mentioned. We assume, for example, that aspiration, motivation, work habits, and skills affect occupational allocation by virtue of the demands of the job market. It is not clear, however, how much high aspirations increase mobility. While low aspirations seem to be an obstacle, the opposite often increases frustration. Here again, it is the interaction between variables which is significant, and especially the interaction between aspiration and its realization, as measured by quantity and quality of resources and as determined by the sum total of variables listed.

Rivka Bar Yosef's study (1965) of factors contributing to the adjustment of new immigrants to factory work pointed out that the greater the gap between aspiration and achievement the lower the adjustment. In some cases, the longer the time on the job the less the ability to adjust, since seniority may raise expectations to a level incompatible with real opportunity for mobility.

Research cannot always find answers to these questions, because many of the variables cannot be measured and because we lack some of the necessary tools. Planning and execution may therefore be undermined if information about the relative importance of various resources is insufficient. Since we are uncertain, for example, whether vocational training is more important than work experience, we must decide between on-the-job or pre-employment training.

There are a number of findings which, though insufficient because of unsystematic research, do point the way to action. A survey by the Authority for Manpower Planning of the Ministry of Labour (1970) deals, among other issues, with the attitude of owners of carpentry shops toward graduates of vocational courses in carpentry. Of eighty-two respondents, thirty-five preferred on-the-job training in their own shops, seventeen recommended a combination of vocational courses and on-the-job training, and the others approved of the

existing system of vocational courses, but criticized the courses themselves.

Rina Doron's (1968) survey also revealed a preference for a combination of on-the-job training and vocational courses. But since the problem, as indicated, has not been systematically studied we cannot reach a firm conclusion.

A subject for study which clearly emerges from this discussion is whether it is more important to concentrate on specific skills or on general work habits, self-esteem, and attitudes toward work.

B. Studies of Different Populations in Terms of Personal Variables

Since we hold that education should outweigh the negative effects of socio-economic background, it is vital to determine the characteristics of each population before planning social change. Vocational education encompasses a greater variety of populations than general education, and should therefore offer a greater number of educational alternatives.

Studies of Beit Shemesh (Lotan and Ben Yitzhak:1968), Netivot (Lotan and Ben Yitzhak:1970), and Morasha (Adler:1965), dealt with the characteristics of youth who lived in

development towns. In all three towns it was found that only 30% continue their studies, and a small minority was neither in school nor employed. In Morasha most working youth were in marginal jobs, and in both Beit Shemesh and Netivot unrealistic status aspirations and expectations of mobility were significantly present. Low aspiration suggesting apathy, on the other hand, characterized the young people of Morasha, who nonetheless considered education the prime road toward success. In both Beit Shemesh and Netivot, youth had difficulty in conceptualizing the future and developing long-range plans. In terms of applying the concept of the importance of education, it is interesting to note that even in Morasha, where education was considered important, most youth did not continue to study and those who did dropped out in great numbers. This was true also of the minimal exploitation of leisure time for supplementing vocational activities or broadening horizons. A hypothesis congruent with the line of our argument seems thus to emerge: the attitude toward education is itself unable to produce change unless the disadvantaged students develop the capacity to delay immediate gratification and are trained to utilize the resources acquired in the process of their education.

Although a number of studies classify certain resource deficits among particular populations, there remain unstudied other populations for whom the educational system or vocational training has failed. One example is girls who drop

out of school. Their problem differs from that of boys mainly because of family and environmental attitudes toward vocational education and female employment, creating a difference in self-image and motivation. It might be worthwhile to combine research on characteristics of the female population with research on their families, since the latters' ambivalence toward their daughters' education may contribute to school failure and to the vocational dilemma. They exemplify, however, only one section of a wide spectrum of problematic populations - sub-classes of disadvantaged - not yet systematically studied. Even the studies reviewed were in fact not meant, in certain cases, to inquire systematically into the resources and deficits of a given population, while in other cases the validity of the findings is questionable.

It seems necessary to assess the greatest handicaps and, more important, the greatest assets of the population. Once characteristics are defined, the means or operational principles by which to solve concrete problems must be planned.

C. Definition of Concrete Problems and Operational Principles

The work group is an example of an attempt to solve the specific problems of unattached youth. It appears, from work with street-gang members (Leisner : 1969), that these

young people neither want very much to work, partly because of the nature of the jobs available, nor particularly trust social institutions. They tend, therefore, not to use such facilities as employment or counselling bureaus. Since the Ministry of Labor survey (1967) of those seeking employment revealed that far more unemployed youth were not registered with the youth-labour-exchange than were registered, the prcblem became one of finding these young people. "Reaching out" or making contact with youth in their own meeting-places is a solution used by work groups and such frameworks as the street gang.

The problem of low motivation among the "unattached" raises the question of incentive. Spilerman (1971), examining alternative means for increasing motivation, theorizes that combining material inducements for achievement with peer approval can effectively motivate lower-class adolescents toward academic goals. He bases his theory on various sources (Douvan:1956, Terrell et al:1959, Zigler and LeLabry:1962) which found economic incentive especially relevant. Because of the value of money in such groups, material incentives, it is felt, will not only reduce conflict between achievement and group norms but will also exploit existing values. Spilerman, who talks about group rather than individual rewards, refers on the one hand to differential material incentives which increase group achievement, and on the other to social rewards to reinforce economic incentives.

The "work group" in Israel, like any other adult employment, is based on the principle of economic incentive. Each member receives a fixed daily pay, which serves merely to enhance the framework and does not change because of achievement. Social rewards, however, are considered reinforcements rather than incentives. Whereas Spilerman refers to exploitation of existing group values to encourage achievement, it is possible, in order to change group values, to exploit the social reward received by the individual who conforms to those values. If, in other words, a given framework changes the general group outlook toward achievement, then each member's individual achievement will be rewarded socially. The work group therefore operates as a definite social entity, with the daily salary as a means to attract the youth.

The exploitation of the work group as a social entity has other advantages. Even when unattached youth manage to find jobs many cannot adjust, but the group facilitates adjustment. Lack of security outside the group derives from the same tension which accompanies and bothers these youth whenever they are away from their peer environment. Group treatment and a sheltered work situation serve to reduce the tension aroused by work relations and adjustment to the job. The role of the counsellor is to ease or cushion the extreme changes which the group eventually undergoes, either because of institutional contacts or because

of internal social processes. The informal and symmetrical relationship between counsellor and group is an alternative mechanism to formal authority.

The foregoing has been concerned with operational principles determined by isolating concrete problems of a given population. Activities do not all derive from this process, but usually rely on broad general goals to determine means and therefore tend to fall short of their purpose.

D. Action-Research

In Israel there has been little action-research to verify theoretical principles in vocational education. Evaluation, if any, has come only after a certain period of activity. Even in the unique case of work groups, the first of which were considered experimental, supervision and evaluation were not professionally carried out. Although the program was systematically expanded after the first experimental group was judged successful, the effectiveness of the program's principles was evaluated neither by well-defined criteria nor by precise tools of measurement.

E. The Establishment of Criteria for Evaluation of Activities in Vocational Education

Evaluation of the success of a particular program calls for the consideration of goals in the light of needs, on the one hand, and of means in the light of goals on the

other. Criteria and tools for measurement must be established if goals are to be systematically evaluated, and attempts to compare the different criteria used by researchers must be made.

In fact, the decision as to which are important criteria appears to be affected by normative and ideological factors or by pragmatic and arbitrary considerations, rather than by rational deliberations. We do not believe that it is possible to choose criteria on a purely objective basis, since the greatest possible number of criteria is probably the most effective. We do object, however, to studies which ignore relatively important criteria for the sake of criteria which do not relate to goals in the light of needs and to means in the light of goals.

We shall refer to criteria dealing mainly with the contribution of a particular framework to such processes of vocational allocation as adjustment, steadiness on the job, and mobility.

F. Specific Studies of Different Frameworks and of the System as a Whole

Since there has been little evaluation of vocational education as a whole, and no systematic evaluation of coordination of the various frameworks within the system, the different activities will be considered separately.

The three broad categories classified at the beginning as in need of special attention were those of unattached youth, working youth, and youth in vocational education. The programs surveyed will therefore accord with these categories in the order given.

1) Frameworks for Unattached Youth

Vocational education programs for the so-called unattached youth are relatively new, mostly experimental, and therefore hardly studied. The work groups previously discussed are among these frameworks.

The work group, initiated recently on a fairly wide scale, assigns each group and its social counsellor to a place of work like kibbutzim, industry, and army workshops, where the members, in small, homogeneous groups, receive on-the-job training as well as general education courses.

The first of these work groups was set up experimentally in an army workshop in 1970. There is only one report on the experiment (Ministry of Welfare:1971), which fails to follow up the participants but does offer a general idea of what happened to the members of the group. It records two changes, one immediate, the other slow and continuous. The immediate change was in adjustment to work. We must recognize, however, that this was a sheltered situation and that change cannot be measured until it stands up under regular working conditions. The second change was in general behavioral

norms in the group, but again it is unclear to what extent these changes were internalized. Because we have no conclusive data, the report allows us only to predict the ease with which youth will adjust to ordinary jobs.

The newspapers (Ma'ariv:March 22, 1972; Yediot Aharonot: June 28, 1972) present diverse views, reporting on the one hand the difficulties of adjustment to the problems inherent in the job, and on the other rapid expansion of work groups and absorption of 2,000 youth. From June, '71 to June, '72, job problems, according to the papers, arose because of the low rate of pay, forcing youths either to drop out or to moonlight. The adjustment problems arose when the young people moved from a highly sheltered and dependent situation to an unsheltered one.

The Kelet attempts to help unattached youth to use their time effectively. Emphasis is on the development of fundamental skills and the formation of good work habits, under the supervision of a counsellor. As in the work groups, everybody receives a daily stipend, but the job training is in a simulated situation which offers no real opportunity for utilization of skills. This apparent disadvantage, however, is advantageous for those adolescents who, initially at least, cannot face the exigencies of a general social institution.

There has been no systematic study of the Kelet, nor are there general reports about it, but since such groups seem to offer solutions for the most problematic youth, the need for research appears imperative.

The Miftan is a framework offered by the Ministry of Welfare, established to absorb the more problematic unattached youth. Ninety-five percent of the youth are of Eastern origin, according to a Ministry of Welfare survey (1969). Thirty-three percent are functionally illiterate and their general education level is far below average. Many have dropped out of school and some have police records.

Small-group activity characterizes the Miftanim, whose curriculum consists mainly of vocational training for all but the most advanced pupils, for whom general education is also provided. Trainees receive a salary graded according to points, which are recorded for daily tasks as well as for attendance, punctuality, etc. The trainee also receives an additional 75% of the net profit of everything he produces.

The Ministry of Welfare survey pointed out that the adolescents, especially the dropouts, have trouble adjusting; even among graduates of Miftanim boys were sometimes dismissed from their jobs because of conflicts with other employees. There has as yet, however, been no systematic evaluation of resources generated by this framework.

2) Studies of Frameworks for Working Youth

Apprenticeship, potential channel for occupational mobility and personal development, offers general and vocational instruction for working youth, combining one day of study and five days of work each week. Unlike vocational programs which isolate education, apprenticeship directly combines work and study, keeping the study load light and particularly suited to the low learning potential of the participants. At the end of the two-to-three year program, the trainee who passes the final examinations receives a certificate which is expected to ameliorate his status and increase his chances for mobility. The idea of earning even a minimal income and at the same time going to school is considered a reward pattern that will attract youth early forced to "choose" the work alternative.

Although a high percentage of trainees who took the final examinations in 1970 passed, only 65% of those who completed the program took the examination, bringing down the percentage to fifty. This means either that the certificate is relatively meaningless or anticipation of failure is high; the latter might explain why those who do take the exam are so successful. Further investigation is certainly called for. Other aspects for study are whether the certificate in fact increases status and what the institution contributes beyond enhancement of individual value in the job market.

A survey of apprentices between the years 1957-63 (Ministry of Labor:1971) used a number of evaluative criteria:

a) The dropout rate (appeal of framework);

b) Difference in employment rate among dropouts and graduates (resources which the framework generates);

c) Rate of employment in training-related jobs (relative importance of specific skills learned during training).

The sample included only those youth who reached the second and third year, discounting from the outset the first-year dropouts, who are the most numerous. In the second or third year only 14.4% dropped out, a statistic explained by the fact that, after apprenticeship, which is the lowest educational framework, there is no place else to go. The high percentage of dropouts - 40% - among trainees who had not graduated from primary school, makes it appear that for those with the greatest difficulty in adjusting to institutional frameworks even apprenticeship may not be a solution.

No significant difference was found in successful employment of trainees as compared with dropouts, nor in income level, steadiness on the job, or degree of satisfaction. Beyond this, only 40% of the trainees found employment in training-related jobs. What resources, therefore, does the institution generate?

Apprenticeship in general contributes relatively little. Specific skills and technical knowledge seem more or less unimportant in the job market, although different vocations demand different assets. By and large, however, apprentices working in jobs unrelated to training earned more than those in training-related jobs. Perhaps the income factor motivated many to seek non-training-related jobs; perhaps, too, a subtle relationship exists between training and employment. It therefore seems reasonable to examine such a relationship, as well as the use to which the trainee puts his knowledge. Other frameworks for working youth, such as the factory-industrial school and Union of Working Youth, should also be examined.

3) Formal Vocational Education

Formal vocational education is expected to absorb significant numbers of disadvantaged youth and to serve as a channel of mobility and a mechanism for socio-economic integration. The percentage of vocational school students of Eastern origin has in fact increased from 35.9% in 1964-65 to 58.2% in 1969-70, surpassing the increase in the general educational system. But, as the introduction to this chapter noted, there is an undoubted demand for improving the quality of vocational education and for increasing recruitment selectivity, a demand which the system has obeyed by extending the school day and year and by stressing theoretical subjects.

Numerous differential frameworks have been developed to attack the problem of conflicting pressures. The effectiveness of such differentiation is of course questionable, in view of the danger of segregation according to socio-economic levels or ethnic origin, which might maintain or even widen the gap.

Since 1967-68, as part of the effort to develop different frameworks, pre-vocational courses have been introduced into vocational schools. The stated objectives of these courses cast doubt upon their ability to satisfy the needs of the disadvantaged. To try to increase the learning potential of those who are neither able nor willing to go to school seems to disregard their needs. Since, furthermore, unlike apprenticeship and industrial (or factory) schools, there is no direct connection between education and employment, the result is often isolation from the world of work rather than integration into it.

The Horowitz and Frankel (1971) survey of semi-vocational and vocational frameworks, emphasizing the isolation of youth with low learning potential, pointed out that achievement in pre-vocational classes was no greater than that in primary school. Expectations of both the students and their parents were relatively high, while self-evaluation remained low. The study further noted that the gap between expectation and self-evaluation, or ideal and real self-image was

greater in three and four-year schools than in two-year schools. According to Rivka Bar Yosef's study of adjustment to work, the greater the gap between real and ideal self-image, the lower the adjustment level. Such findings decrease the feasibility of pre-vocational courses.

Regular vocational education, either for two, three, or four years, used to attract school dropouts with relatively high aspirations. The vocational school, as previously noted, seems more than any other alternative to offer opportunity for mobility, which is why aspiring students invest both time and money in such a framework. What opportunities does it in fact provide?

Certain surveys suggest that most graduates work in blue-collar or semi-skilled jobs, routine, unsatisfying and socially undesirable. A 1970 public opinion poll revealed that 22% of those with a partial secondary school education were dissatisfied with their jobs, as compared with only 26% who were satisfied, whereas among graduates the percentages were 19% and 35% respectively. Only 6.5% of all matriculated graduates of secondary school are graduates of vocational school, although the percentage of vocational school students is 40% of the secondary school population. Thus it is obvious that numerous vocational school students are dissatisfied with their jobs, a dissatisfaction probably reinforced by their relatively low income. Only 35.6% of

vocational school graduates, according to Rena Doron's 1965 survey, reached comparatively high income levels, while a minority of 5.5% remained at the lowest level. Thus the gap between aspiration and real opportunity for the graduates appears to be great.

Rivka Bar Yosef's adjustment study (1965) indicates that income level correlates with adjustment, and that of all the components of expectation - income, vocational role, degree of authority - income is the most important index of adjustment. Apparently, therefore, low adjustment and low satisfaction can be expected from vocational school graduates.

The Authority for Manpower Development (1969) compared investment - tuition fees and loss of earning while studying - with expected increase of income as a result of additional vocational education. At the same time the survey compared society's investment - direct vocational education subsidies and the loss of productivity while the worker went to school - with the expected increase in productivity as a result of the investment. The return on the investment of four years of education, it was discovered, was realized only at age 35 and over, whereas between the ages of twenty-one and thirty, people with two years, or partial, vocational education were earning more than those with four years. Two years of experience are apparently worth more than two years of study,

thus indicating that, economically speaking, a two-year investment is more profitable than a four-year one. The authors believe that even from the point of view of society the investment is not worthwhile after two years. There is still the question of what happens in terms of mobility after the age of 30.

Another criterion for evaluation is the purely vocational resources or skills which the framework generates. Although there are no precise, directly related data, we can, as with apprenticeship, use the criterion of training-related employment. Rena Doron's 1968 study used tools of measurement more sensitive than those of the apprenticeship survey, which distinguished between training-related and non-training-related employment. The Doron study, however, distinguished between directly and indirectly training-related jobs and high-level training-related and non-training-related jobs. We learn from this that only 29% of the graduates worked in non-training-related jobs and the remainder either at directly or indirectly training-related ones or in high-level training-related ones. The last category included 15% of all graduates, with an average of 5.9% from three-year schools and 27.1% from four-year schools, 4.6% of Eastern origin and 16.9% of European-American origin. Although the dropout rate from vocational schools is greater among the Eastern than among the European-American population, the difference is less than that in academic high schools.

To conclude: In general, vocational education seems increasingly less able to fulfill the needs of the disadvantaged, since higher standards are more and more necessary to meet the demands of the economy. Investment in the four-year track, while perhaps congruent with economic needs and profitable to matriculated graduates, is of questionable assistance to the disadvantaged, whose achievement is low and whose dropout rate is high.

At the same time, however, it should be noted that vocational rather than academic education, including the four-year track, has helped students of Eastern origin to leap the barrier of secondary education. We must, however, continue to pursue the question of whether the continuing flow of such students into the different vocational frameworks calls for schools that are less demanding and less selective, but whose curriculum includes general academic subjects. As the upwardly mobile groups, mainly of Eastern origin, feel increasingly impelled to forsake their blue-collar jobs, the need for such schools grows greater and investigation of their development becomes imperative.

4) Vocational Courses

In addition to formal vocational education, vocational courses of one or two years and sometimes less than one year are offered by the Ministry of Labor. Although there are no

evaluative data, evaluation of similar courses taken by adults is useful. Despite the fact that adult participants usually want to change rather than acquire a vocation, the courses themselves are similar in principle and method.

The Authority of Manpower Development conducted a follow-up survey in 1970 on participants in the 1965-67 courses, whose goal was to train unskilled adults. Although the survey suggests that employment and average income increase, we believe that variables other than completion of the course, such as changes in the economic situation, rates of employment, living standards, etc., which might have affected the changes, were not isolated.

It appears in general that short-term courses directed toward specific goals and jobs are, at least in the short run, more effective than longer ones. A significant finding, in our view, however, is the less than 50% rate of training-related employment among graduates. Since the course apparently fails to transmit necessary, specific vocational skills, what resources are generated? Does the certificate and/or participation in a framework enhance job opportunities? Or does the framework generate such other resources as appropriate work habits, precision, discipline, and self-confidence? These questions demand systematic research.

G. General and Specific Problems

Our discussion of six areas of research in the field of vocational education leads us to a seventh, which in effect synthesizes the other stages. In terms of general and specific problems, we are concerned both with the findings of the studies cited in this chapter and with our own conclusions. We shall attempt also to isolate as yet unexamined problems.

Both the general and specific goals of vocational education seem problematic to us. We want to know the deficits and assets of the population, which of the variables affecting occupational placement can be changed by education, and the relative importance of these variables for occupational placement and mobility. Although we cannot answer such questions definitively, we must keep them in mind when we try to summarize and highlight the problems and challenges of vocational education.

There are two major dilemmas:

1) How important are technical skills as compared to the habits, values, commitment, etc., that constitute general preparation for work? The significance of this question is emphasized by the fact that numerous graduates ultimately take non-training-related jobs.

2) Considering the rate of technical development, should the student, according to his ability, develop increasingly specific technical skills or should he learn general fundamentals which may help him to adjust to the changing markets?

Society, to repeat, confronts the system with opposing goals. Formal vocational education must therefore choose between non-selectivity for the sake of the dropouts from general education and selectivity for the sake of the skilled manpower requirements of the labor market. The best interests of society and the best interests of the individual are here in conflict. How are these conflicting goals to be reconciled?

The question of inputs must, as we have repeatedly stressed, be related to expected outputs, as determined by an assessment of the needs of the population. Thus, for example, we cannot speak about the means for raising motivation before we have answered the question of general versus specialized training. But even before that we have to examine whether the disadvantaged in fact lack motivation. There is no comparable finding in Israeli research to support the American theory of low motivation among the disadvantaged. Why then is there persistent failure? If in fact there is a problem of motivation, what type of reward will most

effectively raise it? Is monetary reward of greater value to this population than achievement itself?

Another fundamental question is that of education versus work experience. Are frameworks which combine real work with training more advantageous than those which are purely educational? What is the optimal length of training and the cost-benefit of both the individual and societal investment? What inputs are necessary to make vocational training for the lower achievement groups an educational and not merely a segregated experience? Fianlly, what happens to those who cannot be absorbed into any formal framework? Is informal education an answer? Can such vocational frameworks generate skills as well as personal resources? How effective, in other words, are programs which offer the disadvantaged activities differentiated according to stages of detachment and levels of potential?

H. Comparison Between the United States and Israel

A small country can always learn from a big one whose resources permit investment in both large-scale programming and research. But before we examine certain areas in American vocational education which seem valuable for Israel, we must indicate some of the differences both in socio-economic conditions and the general educational system. We shall make this comparison according to the following four variables:

1) Availability of educational and vocational opportunities;
2) Employability, or the extent to which the individual has acquired the resources necessary necessary to meet the demands of the occupational role;
3) Accessibility of opportunities and proximity to existing markets and channels of information;
4) Utilization, or the extent to which resources are used.

Whereas in America availability of opportunities is a problem which affects the labor market as a whole, in Israel it generally is not. Entry into the labor market at low level jobs is possible; upward mobility from this point is difficult. In considering the American programs, we must remember the differences in starting points, which mean that in America individual resources can, in spite of deficits, make a person theoretically employable but in fact jobless, whereas in Israel low-level individual resources eventuate in low-level employment from which it is difficult to advance.

The period of free compulsory education in Israel, shorter than in the United States, means that job problems begin earlier, and that in-school programs, like pre-

vocational training to keep young people in school, must start in the lower grades to be effective. Pre-vocational courses, begun at seventh grade in the United States, offer vocational incentive and opportunity for re-integration into regular classes in 8th or 9th grade. They also prepare students for leaving school by providing orientation to and understanding of the world of work.

Curriculum organization and teaching methods for the disadvantaged appear to be more flexible and informal in the United States than they are in Israel. There are no such pre-vocational programs in Israeli primary schools, and the student who cannot adapt has no alternative, at the end of grade school, but to drop out. Since the formal educational framework has so little to offer, the disadvantaged student, even if he does return to school, is at a dead end. Without a certificate for eight completed years, the student has little chance to enter any vocational course or program.

Neither primary nor high school in Israel offers young people a chance to work while in school, whereas work-study programs in the United States allow students not only to sample both worlds but to stay in school while earning money. The adolescent, between childhood and adulthood, often needs to earn money not only because of his role in the family but also for his own self-esteem.

Work-study programs generally move from exploratory to general work experience and then to vocational experience, in order to let students discover where their interests lie, to help them select and prepare wisely, and eventually to find jobs in which they can grow. In the first stage, groups of students, under school supervision, work in community services like parks or school grounds or in sheltered school workshops like mailing and public relations. Later, closely observed by the school, they take part-time jobs, and finally, guided and supervised by the school, they are given secure full-time jobs.

Programs like these have been developed for youth in danger of dropping out of school because of poor achievement and a concomitant sense of failure. The chief manipulations are: curriculum, scheduling, and classroom structure, as well as incentives to stay in school. It is assumed that completion of high school will lead to higher social status and higher-level jobs. But the disadvantaged student often pays for his training in forfeited earnings and the frustration that may result from rising expectations and a cumulative sense of failure.

The concept of self-help, fundamental to the Neighborhood Youth Corps, Mobilization for Youth, and Job Corps is another strategy rarely used in Israel. Self-help assumes:

1) The need of the disadvantaged for jobs which they consider useful to themselves;
2) The need to combat negative fate control and thus develop a belief that they can control their environment;
3) The need to create jobs which will help to rehabilitate the disadvantaged themselves while rehabilitating the community.

The programs thus conceptualized range from renovation, rehabilitation, and development of the immediate neighborhood (Neighborhood Youth Corps) to conservation programs and retraining in outlying areas (Job Corps). The youth may also take over small businesses, not necessarily limiting such enterprises to the immediate neighborhood.

Israel has devoted little attention to creating jobs for the disadvantaged, partly because there appears to be no job shortage. But the mere existence of work does not assure well-planned opportunity for the disadvantaged. Because of the shortage of jobs in the United States, expansion of job opportunity is a vital aspect of programming from which we in Israel have much to learn. Israel needs jobs which compensate for the low social status of the disadvantaged by offering higher pay and a degree of apparent usefulness and significance.

In terms of vocational education in general and education for working youth, Israel is more active than the United States. American programs are in fact compensating for the absence of a rigorous system of vocational education like that which has been developed here. We also recognize the importance of giving working youth additional and necessary resources for advancement, but the strategy for doing so has not reached its goal. The apprenticeship program appears to have failed, we believe, not because it lacks vitality but because it lacks effective methods.

Finally, guidance and counselling in the United States are more highly developed than in Israel, where it seems to be used only for the hard-core disadvantaged. In the United States, psychological and social guidance as well as vocational counselling is integral to almost every program, and is either individually or group-oriented. In-school vocational counselling deals with future employment, while out-of-school programs utilize both pre-employment and on-the-job counselling. Without such individual attention, we believe, both employability and the readiness for it are reduced, and information and job accessibility are limited.

The foregoing comparison stresses only those aspects of American vocational education which we consider relevant to Israel. Not only do we not suggest indiscriminate

adoption of American programs, but we cannot over-emphasize the need for systematic research to insure the success of planning in Israel.

Summary:

In considering the major strategies in vocational programs, we have been more interested in where than in how to manipulate in order to achieve a more effective relationship between educational inputs and outputs. We want, in other words, to discover the point at which manipulation and innovation will be most effective in generating resources that enhance occupational integration and mobility.

The uniqueness of vocational education programs lies in utilization of resources. Formal education and other forms of informal education often lack a direct connection between the immediate outputs of the educational process and their derivative outputs in terms of social and occupational roles.

At the same time, it seems that the attempt to develop technological-vocational education particularly oriented toward absorbing disadvantaged youth does not always solve their problems, because it educates for skills rather than commitment and motivation. Put differently, it closes the graduates' options, while general education opens them. Vocational education per se, which usually lacks measures

to adjust content, method, and level of study to the specific characteristics of the disadvantaged does not necessarily provide a framework suitable for them. Nor is it clear whether the economic returns of this form of education for the majority are greater than those of any alternative framework.

Significant is the fact that the dilemma faced by vocational education in this country is not peculiar to Israel. Most developing countries apparently share the problem of conflicting economic and integrative needs, at least in the short run; and as a result, the educational systems, and especially the vocational educational systems, must adjust to conflicting pressures.

CHAPTER III

INFORMAL EDUCATIONAL ORGANIZATIONS

INTRODUCTION

As recent studies show, interest in the informal aspects of formal organizations has grown, and theoretical models that incorporate informal and bureaucratic elements have emerged. The informal elements, however, in almost all such models, or in the research based upon them, do not enjoy independent consideration, but are considered only in juxtaposition with and against the background of the formal and bureaucratic components (Corwin:1970).

In the study and discussion of education an emphasis on deformalization of frameworks, with special attention to the development of cooperation between teacher and pupil, seems to emerge. In fact, however, deformalization is almost by definition severely limited in schools, where pupil participation is all but obligatory and where the stated objective of preparing youth for adulthood reinforces adult supremacy and reduces the possibility of informal relationships. Musgrove and Taylor (1969) and Bidwell (1970) maintain that the school is, in principle, a formal system, typified by hierarchic teacher-pupil relationships

and by an inflexible examination system which regulates its activities. Even open or progressive schools operating within the framework of compulsory education retain an objective difference in power between teachers and pupils, thus consigning informal qualities not to structure but to teacher goodwill.

In spite of some research about the nature and strength of informal components in educational organizations, there is no systematic evaluation of informal education as an agent of socialization in general and as a potential alternative for education of the disadvantaged in particular.

We shall therefore suggest some of the main characteristics of informal educational settings and point to their potential and hypothesized value in the education of disadvantaged youth - whether in an extra-curricular sense or as opportunities for a second chance (or recovery).

A. The Symmetrical Pattern of Relationship and its Impact Upon the Development of Value Commitment to Universal Codes of Behavior

In informal youth systems, unlike formal frameworks with their hierarchial relationships, a pattern of symmetrical relationships exists. Non-symmetrical interaction allows the stronger to impose his will upon the weaker.

The weaker will obviously try to change the rules in his favor whenever he can. In a symmetrical relationship, however, participants possess equivalent resources and mutual commitment, the power compulsion is reduced, and a basis for the development of an ethical awareness created (Piaget:1965).

It can further be assumed that, through children's cooperation with equals, their own autonomy and a respect for that of others begin to develop. Respect for the autonomy of others may become the basis for the perception of the fairness of the regulations governing such autonomy (Selznick:1969). It seems to us that, in the case of disadvantaged youth, development of moral awareness in general and understanding of the rules that govern social interaction in particular may well be a condition for successful participation in society.

B. Expressive Patterns of Reward

As opposed to formal educational organizations, informal frameworks offer a high degree of immediate reward, since gratification is inherent in the very act of participation in a group, in the nature of relationship between peers, and in the recreational orientation of informal activities. The entertaining and gratifying nature of informal educational settings is responsible for the widespread notion that these

are merely extra-curricular, supplementary, or leisure-time activities.

We contend, however, that these settings can serve to generate resources in or for disadvantaged youth. The fusion of the previously discussed element of symmetry with that of expressive gratification might mitigate the egoistic expectation of immediate satisfaction, since symmetry demands consideration of others. It might, moreover, be projected that, unlike the school situation, immediate gratification and expressive rewards motivate disadvantaged youth to work hard, to achieve, and to abide by rules and norms.

C. Multi-dimensional Pattern of Activity and its Impact on the Status System

Another structural ingredient of informal frameworks is range of activity, whereas in formal school systems acquisition of intellectual skills predominates. In informal situations young people can develop their physical strength or artistic or athletic ability, among many other non-intellectual pursuits. If differentiated performance leads to differentiated scales of evaluation, participants who each excel in a different field will have equivalent status: intellectual, artistic, political, or physical, according to proclivity. Status in the peer group can thus be achieved and reciprocal interaction encouraged. Informal

educational systems, therefore,can help in the equalization process of youth who would have been, or are, at the bottom of the formal school ladder (Turner:1964).

D. Autonomy

Although autonomous informal youth cultures often become "frameworks for aggregate rejection of the adult world" (Rosenmayr:1972), some of the structures and social elements might be useful in the education of the disadvantaged.

More specifically: Participatory decision-making and planning of activities, plus voluntary joining, might make informal education a useful alternative to traditional settings in which disadvantaged youth generally fail or drop out, and to which they become antagonistic.

In our projected "ideal type" of informal youth organization, we have focused on structure and role and such characteristics as symmetrical relationships, expressive reward patterns, multi-dimensional activity, and institutional autonomy. In considering Israeli informal educational frameworks and the research connected with them, we can make distinctions according to the degree of autonomy or the intensity and pattern of adult control. Special attention will be paid to the function of the different frameworks in generating resources among youth of disadvantaged backgrounds.

This analysis assumes, as we have indicated, that informal educational frameworks, because of their special characteristics can play an important role in educating disadvantaged children and youth. It seems regrettable that only a few systematic efforts have thus far been made to use such frameworks.

Two types of population must be differentiated: disadvantaged children who remain in school in spite of academic difficulties, and those children and youth who drop out and are marginally employed or completely unattached. Informal education can add to the sense of worth and security of the former group, to their ability in areas apart from the scholastic, and to their recognition of acceptance, in spite of school problems, by a wider group. All of this might affect their school performance positively. For the unattached, on the other hand, it might be a second chance, a "recovery institution" for re-exposure to academic or vocational training, as long as the context is open, accepting, permissive, non-competitive, and geared to specific interests and abilities. These informal settings can, in other words, be harnessed to develop resources and usable skills usually lacking in these youth, thus providing the tools for their re-integration into society.

INFORMAL EDUCATION FRAMEWORKS IN ISRAEL

At present there are six basic types:

1) Total educational institutions, mainly boarding schools, youth villages, and youth communities;

2) Intensive total educational environments, mainly summer camps;

3) Ideologically oriented activities (Youth Movements);

4) Task oriented activities ("Gadna,"* Sport);

5) Leisure-time or extra-curricular activities (Youth Centers, Community Centers);

6) Informal group work in the field, reaching out to youth in their natural environment rather than expecting them to initiate the contact (Street Gangs and Youth Gangs).

Within the formal educational institutions two relevant types of frameworks and developments should be mentioned:

1) Informal enrichment activities within the formal educational framework (Extended Day, Voluntary Clubs within Schools);

2) Deformalization of formal education.

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* Para-military youth corps.

A common feature, relevant to our concern, of most of these frameworks is their intensiveness. "Intensive " means that they are concentrated, multi-faceted, and involving, as are, for instance, boarding schools and summer camps, although youth-movements and street groups possess similar elements. Youth and community centers are intensive only when young people are exposed daily to their activities and influence. The intensity of the task-oriented frameworks is of course different, since within them the youth participate in one specific training area. Even if all these frameworks do not offer intensive experiences, however, we continue to believe that this is the means by which they can become educational institutions for the disadvantaged.

The number of youth between the ages of 14 and 17 who are out of school and unemployed is approximately 20,000, and the Ministry of Education announced recently that an additional 20,000 children of compulsory school age have dropped out or are truant. But the 14- to 17-year olds who have not been successfully absorbed into formal educational frameworks or employment represent for our purposes the nucleus of the hard-core, poverty-stricken, and disadvantaged youth. Peripheral to this nucleus are about sixty thousand who may find their way to the organized sector of youth work, but are nonetheless disadvantaged and in need of special care, since they lack the resources of mobility.

In the first section of this report, we reviewed the limited success of formal education in dealing with the problem of socially and educationally disadvantaged children. We do not suggest or justify the expansion and reinforcement of informal education because of the failure of formal education, nor are we blind to the shortcomings of informal settings which, despite years of varied activity, have neither been notably successful nor have reached the more isolated youth. We propose rather to examine some of the existing networks of informal education and to suggest innovations and possible research according to our defined theoretical principles.

THE BOARDING SCHOOL (Hebrew: Pnemia)

Introduction

The boarding school is of course not a purely informal educational setting, including as it does school with all its formal features. At the same time, however, the central feature of boarding schools (or youth villages) is probably the semi-autonomous peer-group (or the "children's society" as the Hebrew language connotes). The warm relationships within one's "house," the closely knit nucleus of emotional and social ties within the peer-group, and the accepting care of the adults in the school or village - teachers, instructors, and counsellors - in many ways substitute for

the family, and include most of the characteristics of informal education.

Background

Youth Aliyah,* upon its establishment in 1933, introduced the concept of education in a group framework within a total environment, ideally envisioning the dynamic development of a youth community to found and settle kibbutzim. The founders assumed implicitly that education in a group framework was the most appropriate basis for cultural transformation.

The absorption of children in collective settlements in and through Youth Aliyah has been difficult, partly because the new immigrant, as opposed to his earlier European counterpart, lacked the ideological background for pioneering and collectivism. Beyond this, increasing modernization, which changed the face of Israeli society, demanded that goals, content, and methods of Youth Aliyah be redefined and that different frameworks therefore be gradually added.

And indeed, within Youth Aliyah today, different educational settings have been developed to generate different resources and thus to provide different opportunities for

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*Youth Aliyah, meaning "The Immigration of Youth" is a forty-year-old Zionist Organization founded to rescue, absorb, educate, and settle children in Israel (originally orphans or children who arrived without families; lately all types of children, especially disadvantaged). Youth Aliyah seems to have developed a rich tradition of boarding-school type of education.

participants. Since there is little systematic research and follow-up on Youth Aliyah graduates, it is difficult to evaluate the impact of the opportunities that were offered them. We shall, nevertheless, examine each type of Youth Aliyah setting from the viewpoint of population and goals, as well as expected and, where possible, observed outcome.

Frameworks

The common element of the various youth aliyah frameworks is their totality and intensity.

a. Kibbutz Youth Groups and Youth Villages

Of the youth in Youth Aliyah in 1969, 27-30% were in several types of kibbutzim, which generally absorb so-called normal children with membership potential, even though they come from disadvantaged backgrounds. The success of the program has been attested by enrollment in the Army, cognitive and value changes, and performance in the Army.

Comparing youth from development towns, kibbutz youth group members, and kibbutz-born youth on the basis of selected variables, Wolins (1971) concludes that "young people, moving from parental homes in development towns and urban slums and remaining in kibbutz youth groups for periods of 2-5 years, change in the direction of kibbutz-born children." He found increased intellectual ability and maturity. The answers to certain open-ended questions, such as self-control,

occupational achievement, social affiliation, satisfaction in group activities, morality of sharing, lay somewhere between former and current reference groups. Amir's study of adjustment in the army shows a similar in-between position for youth group members who score better in terms of competence, rates of volunteering, and adjustment than the general, not simply low socio-economic, Israeli population.

There is sufficient information about the goals of the youth village, but little or nothing about the relationship of goals to means nor about the impact of the various programs on their participants; in other words, the outcome. Neither is there sufficient information about the differential impact of these programs on different types of populations. Although the youth villages that admit bright children appear to have advanced cognitive skills somewhat compared with the kibbutz they seem to have affected value and personality development very little. Smilansky (1966; 1970) showed, on the other hand, that the academic and psycho-social achievement of disadvantaged students in boarding schools was greater than that of the disadvantaged in regular educational institutions.

In view of the shift away from collectivist values and preparation for kibbutz, the criterion for success is no longer the number of kibbutz members recruited from youth villages, but rather the extent to which youth village

education contributes to integration in society by affecting psycho-social resources and thus preparing its students for employment, social and political participation, family life, and cultural involvement. There has been no attempt at a systematic analysis of such potential educational effects.

b. Preparatory Institutions

Because of the significant rise in the percentage of youngsters of disadvantaged origin who turn to Youth Aliyah ill-equipped both cognitively and emotionally, a short intensive program of classes has been introduced to provide the necessary facilities for successful participation in some of the frameworks we have mentioned. According to Wolins and Gottesman (1971), this program seems to be better conceptualized and professionally more sophisticated than its historical predecessors. The program was designed for young adolescents, whose potential intelligence is normal or near-normal but whose cognitive achievement, as a result of a depriving environment, is poor. The preparatory institution seems to succeed both in the initial institution placement geared to academic advancement and in the subsequent kibbutz youth group period (Feuerstein:1969 and Rapaport and Arad:1969). There are thus two stages through which such youngsters move, the first including two years of intensive academic education and pre-vocational training in preparatory classes, and the second, life in a youth village or a kibbutz youth group.

The Rapaport and Arad study (1969) tells us that half of those remaining on the kibbutz displayed positive attitudes toward work, while the other half was neutral. Since a large percentage of the parents of these children were unemployed, the figures are encouraging, even though the neutral attitude toward work of half of all the pupils raises questions. The fact that only one-third were specifically trained in a trade useful in the city and the further fact that only half worked regularly at a specific job on the kibbutz may partially explain the situation.

Seventy-five percent of the dropouts maintained in a follow-up that they had acquired no specific vocation on the kibbutz, again underscoring the failure of the program to prepare youth to work in the city. The high employment level, on the other hand, seems to indicate the success of the program in generating positive orientation toward work and in developing good work habits and skills.

Conclusion

In sum, it appears that boarding schools uniquely synthesize informal education and a traditionally formal framework. Despite wide institutional variations, certain common principles and general characteristics, partly resulting from the combination of formal and informal elements, allow boarding schools and youth villages to broaden the scope

of education to meet the needs of the disadvantaged. All share these significant features:

1) Removal of the disadvantaged from deprived environments;

2) Total educational setting, offering the chance for an intensive education;

3) Multi-dimensional activities, to help youth discover their potential apart from academic achievement and consequently gain recognition

4) Experience in autonomous democratic living. The peer group thus becomes a tool for the transmission of values and the generation of commitment to other group members, to the institution, and finally to society;

5) Opportunities for social integration of children and youth from different ethnic backgrounds and social strata.

Further Research

It is evident that existing studies leave room for more systematic and somewhat broader exploration as to which boarding school (or youth village) program most effectively develops social and technical skills among disadvantaged adolescents. The appropriate combination of formal and informal elements, of greater or lesser emphasis on

vocational as opposed to ideological elements, is still completely unexplored.

Theoretical Problems

1) Reversibility

Despite the lack of systematic research and the shortcomings of existing data, certain evidence seems to indicate a potential for reversibility in early adolescence, the age group of Youth Aliyah (Frankenstein:1972, Feuerstein:1969). Although this seems reasonable, it requires further attention, since it is inconsistent with other evidence and with developmental theory.

The exact conditions that promote change, the extent of change, and its permanence are questions still unexplored. In other words, how much progress can the adolescent make under optimal educational conditions? What progress has he made in existing programs in terms of cognitive ability, normative development, and social skills? How permanent are the achievements of a Youth Aliyah graduate as indicated by performance at work, at home, and in the army, as compared with those of a person of the same background who was not educated in a total institution?

2) Impact of Institutional Variation

Underlying this report is the assumption that any given strategy can encompass several types of input. This is the

case within Youth Aliyah, whose boarding schools range from the more ideological kibbutz-based groups to the non-ideological youth village. These structural contrasts lend themselves to organizational research.

a. Ability to use resources.

We have questioned throughout whether specific programs respond to the needs of youth so that they can in the future become useful members of society. We think, in other words, that if deprivation is to be overcome, new knowledge, skills, and social characteristics must not only be imparted but their utilization taught. A comparative study of boarding institutions should be made in order to determine if and how the various settings achieve this end.

b. Informality.

The wide institutional variation within Youth Aliyah provides excellent opportunity to examine different patterns and degrees of informality. We have frequently compared formal and informal institutions from the point of view of their ability to generate resources, but in this instance we can compare institutions in terms of degree of informality and the differential effects on acquisition and utilization of resources.

3) The Early Adolescent and His Family

The debate about the virtue of institutionalizing children has yet to be resolved. But the concept of non-parental educational environments described here must be distinguished from the traditional concept of institutionalization, first because the intervention we describe occurs in early adolescence rather than in infancy or early childhood, and second because the institution is usually only a temporary removal from the family. The latter procedure is especially true of most of the wards in youth villages and of a significant number of kibbutz groups.

The separation of a child from his family has to be examined in terms of its impact upon both, as does the process of leave-taking and return to the family fold.

Action Research

1. Comprehensive or Area Vocational School for Kibbutz Groups

A survey of existing frameworks indicates need for a common educational mechanism for those that stay and those that leave the kibbutz. Highly differentiated strategies are therefore needed, some offering routes toward occupation, others towards rural settlement, if we are to utilize all of the adolescent's occupational proclivities and

interests in order to motivate him educationally. Perhaps if the adolescent is no longer catapulted into adulthood with a low-level job, he will be better able to deal with formal educational tasks and thus develop the skills necessary for a somewhat higher-level entry into the social structure. (See chapter on Vocational Education.) On the other hand, even though it sometimes seems preferable to suspend occupational and practical considerations for the sake of unadorned learning, certain groups might be motivated by specific occupational training.

A comprehensive area vocational school might offer several alternative channels to train both Youth Aliyah wards and kibbutz members for professional jobs either in or out of the kibbutz. Such a school would serve the double purpose of teaching technical skills and encouraging social integration, and would also help to maintain the broad kibbutz ideology along with vocational training.

2. Youth Villages in Natural Environment: Development Towns and Poverty Areas

Removal from the depriving environment means not only removal from the family but also a drain of potential resources from the community. The establishment of youth villages or boarding schools in depressed areas is especially advantageous, since relationships with the family and

community can continue and the youth can be retrained within the area itself. Levels of expectation can be kept from soaring, and all advantages of youth village or boarding school education can be put to use. If the youth village also becomes a community center, it might meet the needs of the larger community as well as of the youth.

We turn from Youth Aliyah to the summer camp, a total environment of greater intensity and shorter duration, and lacking most of the formal educational elements of youth villages or boarding schools.

SUMMER CAMPS

The summer camp, in spite of its short duration, offers the kind of total environment which, we feel, may be able to contribute to the education of the disadvantaged. The summer camp, more than the continuing and rather routinized boarding school, is very intense in character. Camps are not new to Israel, but are part of a long tradition originating in the youth movement. Until now, however, camps have not been systematically studied nor have they served as educational institutions for the disadvantaged; they have catered rather to middle-class youth and to members of the youth movement and have served recreational or ideological purposes only.

A thorough review of research on camps in the United States fails to support conclusively the hypothesis that

their intense, informal nature is conducive to advancement of the disadvantaged. The research itself varies, some showing change in the attitudes and behavior of campers, particularly in group relations and self-identity, some showing none. This may be either a function of basic research deficiencies or of the fact that these camps were not successful in harnessing informal educational tools and creating an atmosphere that might affect the general development of these youths.

Recently several experimental camps for disadvantaged youth were established in Israel by both the Ministry of Education and the Jewish Agency, run by ODED.* The NCJW Center for Research in the Education of the Disadvantaged made a survey of both the educational and the Oded camp, using a conceptual framework and independent variables similar to those described in the introduction to this chapter (Kahane:1975). The dependent variables, or potential output, include communication and feedback between campers and counsellors and consequently mediation between the youth groups and the general society.

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*A movement of students of North African Jewish origin, mainly immigrants to Israel via France, whose ideologically motivated goal is to work for the advancement of the disadvantaged sectors of the society (most of whom come from their own ethnic group of Eastern Jews).

A comparison of the educational and the Oded camps is interesting as possible alternative models: the former, compromising between school and a "youth society," emphasizes the intellectual, thus neutralizing the informal elements, and performing less effectively both in assuring achievement and in developing such resources as motivation, self-image, and values. The Oded camp, on the other hand, intense and with charismatic leadership, uses identification with the broader collective through the youth group for the development of social commitment, responsibility, and value orientation.

Both frameworks are modest beginnings in the area of camping for the disadvantaged and indicate clearly the need for further experiment and continued research on camps as informal educational systems.

YOUTH MOVEMENTS

Under conditions of rapid social change, and especially in the case of ideologically motivated social revolutions (as for example that of the re-establishment of a modern creative and independent Jewish nation in Israel), youth movements tend to emerge as the "carriers of the revolutionary banner." They thus enable members not only to play significant adult roles (in a world in which adolescence is ever more prolonged), but also to become involved in implementing the

revolution by their own contribution and participation, fostered by their ideological commitment to the new society's ultimate values. Youth movements, in consequence, are often arenas for the recruitment and training of the future elite. Since youth movement membership makes demands on commitment, time, privacy, and future plans, it is generally limited to a few youth. Only very small numbers of lower-class youth were found in youth movements.

The ideological orientation of the youth movement strongly affected society in the pre-state Jewish community of Palestine and during the first years of statehood. Social and economic developments since that time have brought with them structural and ideological changes in society, thus to a degree eliminating the youth movement, which held fast to its original concepts, from its former central role.

Youth movements today, in spite of political-ideological differences, share certain common educational goals. They still contribute to the political resources of their members, mainly through self-government and leadership, emphasizing general national goals and the importance of founding or joining kibbutzim. Youth movements' dedication both to their own youth culture and to the general emerging new culture makes them an important foundry in which to forge "the new Israeli."

The educational technique of the youth movement is worth mentioning: it proceeds in four stages from recruitment with minimal ideological indoctrination to an effort to establish solidarity with both the peer group and the movement. After this point, an attempt is made to generate ideological commitment and finally to realize such national goals as kibbutz-rural collective settlements or other social services.

The two criteria used to evaluate the educational outcome of the youth movement have been the number of graduates who have joined kibbutzim and the ideological impact on those who did not join. Although only a very limited percentage of the membership has joined kibbutzim, the mentioned factor of the education of an elite does not necessarily indicate that such a small number means failure. Tel Aviv University compared two groups, one consisting of pioneer youth movement people* and the other of those who had never joined the youth movement, to determine whether the higher values of society had been internalized more fully by members than by non-members. The results were positive: not only did those who had been movement members for at least one year display a stronger affinity with these values, but the longer the membership period the greater the affinity.

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*HaShomer Hatzair, Machanot Olim, Noar Oved Lomed, Tsofim.

Yet no significant differences were found in such elements as personal aspiration, status, and occupation.

According to the survey, effects varied among the different ethnic groups, with less affinity displayed toward youth movement values by former members of Eastern origin. The difference in aspiration between members and non-members of Western origin was small, and between members and non-members of Eastern origin much greater, but the level of aspiration among former members of Eastern origin was significantly higher than that of non-members. It is possible, however, that the factor of self-selection may operate in such a way that membership is composed of those with a priori higher aspiration levels. In contrast to this study, Lotan's (1968) indicates a realistic and not particularly high level of aspiration among members of Eastern origin: 27% of the sample intended to work at non-skilled jobs, 47% at skilled and professional trades, and only a small minority aspired to jobs that required further education or training.

The youth movement appears to have succeeded in reinforcing, to a limited degree, value patterns among youth of Western origin, but to have had little impact upon youth of Eastern origin. Its impact on aspiration seems to have been slight for both Eastern and Western groups, as Ben David's study points out. He shows that when individual role image clashes with the collectivist orientation of

the movement, the significance of the movement decreases as a reference. No systematic investigation, however, of the youth movement's educational impact on members of Eastern communities has thus far been made.

Another unanswered question is whether the expectations of the youth movement members coincide with the goals of the movement itself. Lotan's study of members from the veteran and immigrant (mainly Eastern) sectors of the population indicated that the veterans consider the movement mainly a framework for leisure-time activity and age group needs, thus radically departing from stated goals. The immigrant group seem to be using the movement as a stepping stone to help them move from a traditional to a modern society. The results of this study were partly responsible for the establishment of recreational centers in development areas where the youth movement hoped to reach greater numbers of marginal youth of immigrant Eastern origin. These centers, however, focus heavily on recreation and tension-release rather than productive programming, thus failing, as Lotan's study shows, to meet the expectations of lower-stratum members and accounting partly for the high dropout rate.

The central question is still how to make the youth movement relevant for the disadvantaged as well as the middle class. The disadvantaged seem to require a shift from ideology to practicality, in terms both of values and task

orientation. Emphasis on manual labor, collectivism, and the like seems not very relevant to the central goals of society; disadvantaged sectors particularly aspire to move out of and away from labor and agriculture and can only be ambivalent toward an education that attempts to keep them there.

In terms of task orientation, agricultural settlement seems far less relevant than, for example, rehabilitation of poverty areas and efforts to find constructive solutions to social problems. Changes in content cannot be isolated from changes in the organization of educational frameworks and method. But the question underlying these proposed considerations is whether the youth movement can afford changes in its ideological component without sacrificing its elitist character, or whether it can in fact serve the disadvantaged apart from recreational activity. At least hypothetically, it seems that a strong but relevant ideological basis, whether religious or secular, might attract and mobilize the disadvantaged and generate commitment and identification among them.

GADNA

The paramilitary youth corps known as Gadna was established in 1939 as a legal front for illegal paramilitary training of adolescents. In the period of the

British Mandate, Gadna, a joint enterprise of the established military underground and the school system, provided pre-military training under the cloak of physical education. This politically unaffiliated youth corps offered combined military and civic education prior to military training in the underground.

Once Israel achieved statehood, Gadna became an official organization whose aims were to transmit national values - team spirit, mutual aid, discipline, and order - to improve physical fitness as preparation for the army, and to develop leadership. Its activities take place both within and through secondary schools, as well as outside the school system.

Gadna proved flexible enough to adapt its activities to changing needs, demonstrated by its work during the mass immigration of the Fifties when it established about 200 centers in immigrant towns and poverty areas. In later years, however, Gadna was searching for a unique role, torn between attention to paramilitary training of the future officers (i.e., students in schools), and becoming the main or even sole educational agent for dislocated disadvantaged youth.

Only during the last few years has it resumed its concern with solving some of the major educational and social problems of the disadvantaged. In an effort to reach hard-core disadvantaged youth detached from institutions, special

frameworks have been developed, among them the street gang. Gadna has been able to assign young soldiers and other people performing national service to outlying areas where there is always a shortage of manpower. By virtue of its various frameworks, Gadna reaches about 60% of the youth between the ages of 14-18.

In those schools where Gadna is part of the curriculum, in-school activities are compulsory. Besides such obligatory activities as physical training during the school year and national service on kibbutzim, agricultural settlements, or development towns, there are voluntary programs in youth centers. Gadna workers are recruited from the army and also from the civilian population through the Ministry of Education and are assisted by older youth. Since both salary and status are low, however, the workers are constantly replaced.

Although Gadna's ability to transmit values and teach skills has not been fully studied, Eaton and Chen's study of youth organizations (1970), including Gadna, indicates that affiliating with such organizations heightens social concern, commitment, and readiness for national tasks. In spite of the fact that theirs is perhaps the most comprehensive study, it nonetheless does not fully explore the internal dynamics of the institution, particularly with reference to disadvantaged youth. It is important to know whether and

to what extent this task-oriented type of informal education can generate resources in disadvantaged youth and which kind can best do so. If Gadna can in fact make it possible for disadvantaged youngsters, who otherwise would have been rejected, to be recruited into the Israeli Defense Forces, and effectively prepare them for the full terms of service, it will indeed play a crucial and positive role in terms of the analytical frameworks proposed here. The reason is of course that in the army one can acquire a sense of social participation, and as a result achieve greater social mobility.

In spite of all this, we must still investigate the educational techniques and content Gadna should use to realize these goals; is paramilitary training indeed the most suitable means? We must also see whether Gadna's rather formalistic and military features overshadow and neutralize much of its potential as an informal educational institution.

YOUTH CENTERS

Since youth center activities have not been systematically studied, there is little information about their effectiveness, especially in increasing the educational chances of the disadvantaged. The sizable investment of money and manpower by governmental and municipal agencies without any clear or predictable return makes research imperative.

Youth centers fall roughly into three categories, the first of which includes different types of after-school or after-work activities, neither task- nor ideology-oriented. Neighborhood clubs, youth programs in community centers, and other extra-curricular activities exemplify this first type of center, which works toward productive use of leisure time, tension release, group experience, and prevention of delinquency. Available information, though minimal, indicates a measure of success toward achieving these ends.

A survey of a specific youth center, noting certain inherent difficulties, therefore suggested that most of the problems arose from the structure of the framework itself. Recruiting youth and assuring regular attendance appear to be the most serious problems. The framework was least attractive to young people of fourteen and over, the age when many leave the formal educational system, but even those who did join the club eventually left.

The club's limited success in recruiting children and attracting adolescents stemmed mainly from its activity and recruitment methods, from its bureaucratic structure, which confused means with ends, and from poor work conditions which caused a high turnover of counsellors. It is hard to know, at least from the survey, whether the youth center can substitute for the coffee house or discotheque and remove the young from such places, or whether it can rehabilitate as

well as offer recreation. The resources this type of informal youth work purports to generate are not clear and thus there is no way of assessing whether the means and techniques employed do their job.

Other surveys which have examined youth-center work or similar informal educational programs in development towns and poverty neighborhoods point out similar problems.

The case studies of Beit Shemesh (Lotan and Ben Yitzhak:1968), Netivot (Lotan and Ben Yitzhak:1970), and Morasha (Adler:1966) examined among other things the relationship of local youth to the youth center. In Netivot, where youth-center attendance was high, the center appeared not to represent an educational mechanism for changing attitudes, values, and patterns of leisure-time activity. The further fact that those who attended most frequently were the most apathetic leads to the conclusion that the center provided only passive entertainment and did not offer youth from development towns resources to lessen the gap between them and those in the mainstream of Israeli society.

In Beit Shemesh the situation was different. While the Netivot members seemed uninterested and non-participatory, the majority of the Beit Shemesh sample had left the youth center because the activities failed to fulfill the needs which led them to join in the first place. Their initial

enthusiasm had been high and could have been maintained had their interest been held and their autonomy preserved.

The study of Morasha, on the other hand, points to an almost absolute rejection of the youth center, perhaps to be explained by Morasha's proximity to downtown Jerusalem, which offers far more possibilities for leisure-time activity and for mingling with other youth in town. The authors proposed a youth center which would interest both neighborhood youth and people from more established areas, an attractive possibility if entertaining and instructive programs, notavailable elsewhere, were offered.

A fourth study, conducted by the Department of Psychology at Bar Ilan University and also concerned with participation, found that in Holon, outside Tel Aviv, the center attracts both socially active young people and those who display rather high levels of anxiety, neuroticism, and difficulty with adult relationships. The center therefore seems relevant for those whose social needs are greatest. It is questionable, however, whether in its present state it can meet the demands of such a group.

Although the findings of the studies differ, it seems reasonable to conclude that certain modifications must be made in the youth-center framework if recruited youth are to be induced to stay and to participate. To achieve this, or to approach it, content must be geared to the needs of the local population and the autonomy of the group must be

preserved. To the extent that the club or center is to serve disadvantaged youth, it must deviate from the traditional extra-curricular or leisure-time orientation and find ways to overcome deficiency.

It might therefore be interesting to investigate, test, and experiment with ways and techniques that lend holding power to the youth center and develop a participatory membership body. Of paramount importance is to discover whether and to what extent youth centers can become loci to generate resources which youth of disadvantaged origin especially have not acquired through formal schooling.

Youth centers affiliated with a youth movement belong in another category and are generally in development towns. They are similar to the other centers, but are financed and led by the youth movements. To what extent the element of youth-movement affiliation in fact gives these centers a unique flavor is still to be explored.

In a 1966 study, the Society of Sociological Service pointed out that youth movement-center activities conducted like those of centers that are not part of the movement fail to achieve the objective of the movement and to develop affinity toward it. While the center represents a concrete framework for its members, the movement as a whole does not, throwing into question the degree of identification with

the movement and its values. Beyond this, even very active participation in center affairs apparently reflects not particular identification with movement norms and values, but occupational and status aspiration. The study showed that those with higher aspiration internalized values that seemed to them to represent the values of the society at large. As a rule, however, the authors noted that even when values were accepted they were verbalized rather than internalized.

The study examined the influence of the center on personality variables like feelings of deprivation and self-concept; on aspiration toward, for instance, occupational mobility, social status, education; and on patterns of consumption. Apparently the center neither diminishes the sense of deprivationn which seems to inhibit participation, nor strengthens the concept of self which is affected far more significantly by the youth movement than by the center. The center also appears to have little if any effect upon cultural patterns of consumption either by virtue of length of membership or identification with the group.

The study concludes that centers neither directly affected the variables examined nor exploited manifestly high aspiration and readiness to participate. The greatest impact appeared to be on those from the veteran sector whose needs were less and whose resources greater, and who could

take greater advantage of the benefits offered. The youth center as we know it now seems to increase the resources of those already possessed of them.

The center-youth-movement combination appears to have fallen short of its educational goals vis-a-vis youth of disadvantaged origin, in spite of the many disadvantaged who have briefly been members. Informal education apparently did not substitute for school and family, nor has the potential inherent in the center been sufficiently developed to serve as an alternative educational channel.

The third type of youth center is the technical club, which differs from the others because it tries to transmit specific resources. A survey of technical centers conducted in 1970 for the Ministry of Labor evaluated their contribution, which was defined as the degree of influence of the center on continuation of vocational and general education, and on choice of vocation and avocation. Only 40% of the sample, which included graduates 22 years old and older, had joined the club to improve their technical skills, whereas 60% had joined for social reasons or out of boredom. Fewer than 25% had joined in order to learn a trade, but 75% of the graduates were later employed in technical or technically-related jobs. About half of them said explicitly that their center course had helped them to choose a vocation. Since fewer than half the sample, however, were of Eastern origin

and of those only half were sons of blue-collar workers or non-members of the labor force, the survey is not especially significant for the purpose of this report. But because such a center contributes to vocational motivation, generates resources by means of informal education, and offers a more than simply preventive service, the Ministry of Education survey seems significant and accords with our thinking. Informal educational programs that refer to themselves in terms of specific resources, toward which they direct their main educational efforts, can become significant alternative techniques in the education of disadvantaged youth. It seems worth indicating, also, that such centers might serve other frameworks, mainly of an informal nature, working specifically with disadvantaged youth: work group, the previously mentioned "kelet," and the street gangs, which will be discussed later. Since these centers seem ideal settings for small-group activities, they might affect self-image, confidence, or sense of fate-control. These and similar hypotheses, however, call for more specific research into, for instance, how such a program influences image and self-evaluation, and how and to what degree the specific and technical training given in these centers can be transmitted by informal educational techniques.

Three issues at least call for clarification through research:

a. What are the opportunities uniquely offered by the informal framework to generate resources among disadvantaged youth?

b. How far can educational efforts go in attempting to generate resources like commitment, political skills, normative behavior, work habits, and general education before interest and participation is lost, but without which the effort itself may be useless?

c. Can youth centers, as we think they should, be places for active participation, both personal and within the community, in order to produce change? The community center also offers "services," forging cooperation between youth and adults for the benefit of the community. The merits and the dangers of each of these approaches must be systematically investigated.

STREET WORK

The street gang, one of the few frameworks dealing with unattached youth, is relatively new in Israel and the spontaneous nature of its activity restricts somewhat the ability to observe it. Reports are therefore scarce and research that measures effectiveness is non-existent.

While he was working with street gangs, Aryeh Leisner (1969) was able to study the problems and characteristics of the members. According to Leisner, three overriding factors -

adolescence, lower-class status, and ethnic origin - create the gravest problems. Adolescence, as we have suggested, is an uncertain period, characterized by emotional instability. Lower-class adolescents are pressured toward material achievement because of the abundance they see around them. Since their poverty makes them unable to respond to these pressures they are antagonistic to higher classes and to society in general. Their antagonism sometimes leads to withdrawal or deviancy.

According to Leisner, ethnic origin in the face of the dominance of Western culture adds another facet to the insecurity of the street gang member, causing him to reject his family, which stands in the way of his exomic and status aspiration and alienates him because of its authoritarianism. Detachment from the family, however, intensifies his sense of social isolation.

The street gang technique tries to reach the most detached Israeli adolescents by helping them to overcome their feeling of isolation and re-establishing healthy social, familial, and business relationships. An attempt is being made to change group norms and values and to find solutions to concrete problems of education, health, employment, welfare, legal rights, and family relationships. This means helping the members to use the existing basic resources of the group. Whereas exposure to group processes and

increased awareness of services as well as greater confidence in themselves are important as a first stage, the fact that the framework has not yet found a way to generate cognitive or vocational resources points to the limitations of the approach in its present form.

Dafna Yizraeli's survey of street gangs, many of which were not disadvantaged, indicated that the group displaying the greatest readiness for educational activities was the one which could in fact be considered disadvantaged. Although this may be because most of the people in the so-called disadvantaged group were working rather than studying, they felt most deprived educationally and considered the framework a possible source of enrichment and more than merely a means of tension-release. There is evidence to indicate that street gangs have generated such resources as motivation, fate-control, ability to make social contact, self-confidence, self-help mechanisms, and general values concerned with society, work, and morality.

The goals, however, have not been fully defined and the framework is handicapped by a shortage of manpower which makes it necessary to select less problematic gangs and reject the more disturbed ones. Due to a tendency to concentrate on the individual, the group mechanism has not been fully exploited. Since success in street-gang work depends greatly on the personality of the counsellor and

on qualities which cannot be instilled by training, continuity is endangered when the counsellor leaves or is replaced.

The major question once again is how to convert the resources generated by the street gangs into usable tools. The various routes toward rehabilitation must be adapted to specific group needs. One possible solution may be the work group method (see Vocational Education), and another may be a small enterprise as a concrete channel of mobility (see American Vocational Programs), in which a contracting group might be organized or a community center established where youth would work for the benefit of the community.

The street gang, in sum, typifies an informal technique whose most important characteristics are three: First, unlike almost all other educational frameworks, even informal ones, it is based on reaching out: the street worker, in other words, does not wait for his clients, but seeks them out, often at the fringes of society. Second, the street gang technique is to accept the natural grouping of its clients and need not regroup them by any principles of selection or allegiance, so that the worker's success depends strongly on cooperation with the natural group leaders and their acceptance of him. Third, an outgrowth of the second technique and an important factor in street-gang work. is a priori acceptance of members by the worker and his agency, however negative and a-social the group may be. Almost no attitude

or behavior pattern can lead to non-acceptance, exclusion, or punishment.

Here, however, lies the great challenge to the system: while it is undoubtedly important to recruit such youths and keep them within a framework based in the establishment, this is only the first stage. If the second is to prepare these people for adult roles, then much more exploration of informal approaches and techniques seems called for, in order to discover how they can be used to supply the resources necessary to transform street gangs into normative groups.

CONCLUSIONS

In an effort to formulate a conceptual framework within which to evaluate existing informal programs and to conduct research, we have focused on the structure and role of informal youth organizations. Such a framework ideally should include expressive patterns of reward, multi-dimensional patterns of performance, symmetrical relationships, and a high degree of voluntary participation and institutional autonomy. We contend that characteristics like these can develop a socializing process geared toward adaptability and continuity.

Various sorts of youth organizations develop not at random but out of external societal conditions. It nonetheless seems appropriate to focus on their internal

characteristics in order to bring to the analysis a more dynamic educational approach. Youth organizations do not, after all, function only by virtue of various given social forces, but possess momentum of their own which can be channeled to generate social change.

We hypothesize that the properties inherent in informal educational organizations make them at times better able than formal organizations to generate resources, especially for youths of disadvantaged origin.

This conceptual framework must, however, be empirically tested by comparing different informal systems and their specific structural characteristics, internal relationships, and impact. Such investigations must consider the varying cultural contexts and social conditions from which differentiated kinds of informal organizations emerge, the intensity of the different structural frameworks, and the relationship between structure and internal dynamics.

CONCLUSIONS AND RECOMMENDATIONS

Introduction

Formally and informally, in staff discussions and at authors' conferences, this report has been weighed and reassessed. Throughout, but especially in the concluding section, these deliberations are reflected.

We must stress at the outset the crucial importance of the problem we are trying to master. It is clear and generally accepted that the stratification in Israeli society is a direct consequence of the objective social, cultural, and political conditions in the countries where the Eastern Jews originated; it is equally clear that great numbers of them were, upon their arrival here, placed at the social and geographical periphery of the country, thus aggravating the already existing difference between the Eastern and the European population.

When, however, we assess Israel's twenty-five-year effort to absorb and integrate diverse populations, we are faced with an apparent contradiction: 1) The citizens of Israel, including the children of the Eastern immigrants of the early Fifties, have become fully participating members of an industrialized Western civilization; and 2) The marginality - poverty, failure, and deviance - of the second generation of Eastern Jews is perhaps greater than that of

their parents and may be caused by increased security of status and inflated expectation, coupled with limited patience and resources too meager for the demands of modern society.

This marginality is no longer simply an issue of egalitarianism and social justice. It is equally an issue of the quality of Israeli life and the scarcity and nature of its manpower.

Our report has concentrated upon schooling, vocational education and job training, and informal education. It has broadened educational input to include varying contents, contexts, and methods, and has considered output not only in terms of scholastic achievement.

Populations, Ages, and Educational Contexts

Administrators, teachers, and researchers in education are all faced with the problem of where to invest educational capital: in the population as a whole; in the entire disadvantaged population; in those disadvantaged singularly under stress; or in those with marked potential.

Because of the increasing diversification within the disadvantaged population, we believe that there must be concomitant diversification and refinement in research, in order to develop educational inputs relevant to each sub-group.

Similarly unresolved is the question of chronology: Should education of the disadvantaged be directed toward young people of all ages or toward a specific age group? The question can perhaps be answered if research analyzes the results of the work done at various levels, and if experiments are launched to test this issue.

Relevant to this is context: family involvement will not yield the same results as informal educational frameworks, nor can intensified academic efforts produce the same skills as vocational training. No conflict need obtain here, since it is feasible, for example, for the school to focus on the cognitive elements, informal education on motivation. Without carefully planned and executed research, however, there will be no clear answer to this question.

This leads to the consideration of intervention: Should it be preventive or compensatory? Should it concentrate on weakness or on strength? How long should it last? Evaluatively, can we account for delayed responses? In view of the vast amounts of money already spent, with limited success, on efforts to equalize educational opportunities, research must surely try to clarify the different contexts within which different segments of disadvantaged populations at different ages can best benefit from the measures applied.

Methods of Educational Intervention

Today's children are, above all, students. It is therefore the business of education to prepare all children, disadvantaged and middle-class, for their student role. This report is concerned with searching for ways to increase the success offered. Although there is strong evidence of the failure of compensatory education to do its job satisfactorily, we have tried to suggest for study a few methods that appear fruitful:

1. Change the educational context, not the disadvantaged student, by means, for instance, of deformalization.

2. Intensify educational experience by developing boarding schools or summer camps, instead of "doing more of the same," exemplified by longer school days.

3. Develop and train to utilize not only the cognitive resources of the disadvantaged but also a whole array of output resources, perhaps of alternative value.

4. Use motivational elements appropriate to all students, not exclusively middle-class ones.

5. Experiment with method, so that hitherto underdeveloped aspects of the student's role can mature.

Discussion of informal education as an additional and perhaps alternative route to education of the disadvantaged has been minimal, because so little is known about how informal education generates heretofore non-existing or

dormant resources among the disadvantaged. New informal methods need to be developed and research conducted as to the efficacy, for example, of the "reaching-out" technique.

In terms of vocational training, we have still to discover the best way to combine theory and practice, to learn whether training should take place in schools or in industry, and to develop a bridge between training and the labor market. The tragic dilemma of vocational education is that selective-elitist academic systems push the disadvantaged on to a vocational track, while at the same time manpower needs and economic development demand upgraded and improved vocational schools, often too rigorous for less able students.

The matter of educational personnel needs careful study, since research indicates that teachers affect achievement minimally, if at all. Studies however, concern existing staff; none focus on the potential educational impact of teachers specifically trained and professionally, rather than bureaucratically, supervised to improve performance of the disadvantaged.

Evaluation of Success:

The success of educational efforts are evaluated only by examining achievement in school. "Educational success," however, needs broad definition, since success itself is

measured neither by scholastic achievement alone nor evaluated primarily in terms of labor market output. The whole evaluative apparatus must therefore be more fully explored.

Our report has necessarily suffered from its almost total concern with the impact of compensatory education on scholastic achievement, which has been, in terms of the disadvantaged, extremely limited. It is possible, however, that intervention has influenced other aspects of their development, and we hypothesize that its effect may be other than cognitive, and may be outside the traditional bounds of the student's role.

Little is known, furthermore, about the price of educating the disadvantaged: whether those who succeed, in whatever realm, lose something in another, and if they do, what, and how much. Nor can we be sure that the traditional yardstick of academic success suffices to measure or predict success in other areas. Beyond this, we must find ways to measure not only the acquisition of resources but also their utilization. For this we will have to search for different kinds of mediating agencies between the schools and the labor market.

In terms of the goals of the educational strategies discussed, we offer three brief observations that call for further clarification and study:

1. To what extent is "closing the gap" realistic, as opposed, for instance, to raising the standards of the entire population, thus allowing the disadvantaged to start out at a significantly higher level despite the gap.

2. Since cognitive achievement is not only an academic but a recognized societal goal as well, altered school procedures might have little impact on the equalization of life chances of the disadvantaged.

3. A clearer idea of the relative respective importance of ethnicity as opposed to socio-economic background in causing disadvantage could help in devising strategies for educating the disadvantaged.

Research and Implementation of Results:

Although we have not dealt with the serious methodological limitations of the research in this area, some aspects should be mentioned:

1. The research is usually of the survey type, often without proper control over relevant variables. Case studies of schools and even smaller units might prove equally valuable.

2. There is very little longitudinal research, either of a specific group of students or an entire cohort.

3. Research almost entirely confined to cognitive achievement cannot satisfy the objective requirements of this area of investigation. The remarkable social, political, or economic success of young adults once considered disadvantaged and labelled school failures raises questions

about research methods that tend to justify the educational procedures responsible for the poor performance of those students.

Although action research is incontrovertibly necessary, it poses the danger of attempting to assess and understand the impact of too many variables at the same time. The difficulty can be alleviated if observational methods and other techniques are refined and developed so that both the educational procedures and their various results can be more exactly understood.

Education changes broadly and frequently, and research methods must improve if they are to keep pace.

In sum, we believe:

1. Most research in the education of the disadvantaged emphasizes educational methods and techniques and tends to neglect institutional-structural and cultural aspects;

2. Most experiments are with intervention in one phase of disadvantage or by means of a single educational technique. Far more intensive intervention is necessary if disadvantaged students are to be more successfully educated;

3. In addition to concentrating on formal or semi-formal schooling, research should also focus upon informal education.

In the United States and elsewhere there has been little success in putting into educational practice the results of research and experimentation. Systematic study of these failures may help to avoid repeating them. Similarly, successful programs, when widely implemented, are in danger of attrition and extinction, suggesting the advisability of careful and correct program implementation.

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